Surgery MCQs

Comprehensive Review for Medical Student

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Wound Healing and Management

1. **Pyrexia due to a wound infection commonly occurs after which postoperative day?**
   A. Second postoperative day
   B. Third postoperative day
   C. Fifth postoperative day
   D. Seventh postoperative day
2. **A 50-year-old female undergoes laparoscopic surgery. How is her surgical wound classified?**
   A. Clean
   B. Clean-contaminated
   C. Contaminated
   D. Dirty
3. **Which of the following is true regarding the treatment of hypertrophic scars and keloids?**
   A. Continuous pressure using silicone gel sheets
   B. Intralesional Triamcinolone injection
   C. Surgical excision
   D. All of the above
4. **During the maturation and remodeling phase of wound healing, which type of collagen is deposited first?**
   A. Collagen I
   B. Collagen III
   C. Collagen IV
   D. Collagen X
5. **Which of the following is true regarding types of wound healing?**
   A. Healing by primary intention occurs in contaminated wounds left open for 5 days.
   B. Healing by primary intention occurs when wound edges are not approximated and the gap fills with granulation tissue.
   C. Healing by tertiary intention involves leaving a contaminated wound open for approximately 5 days and performing a delayed primary closure if no infection is present.
   D. Healing by secondary intention results in a fine, neat scar with minimal fibrosis.
6. **The normal phase of hemostasis and inflammation in wound healing typically lasts for:**
   A. 1 day
   B. 5 days
   C. 7 days
   D. 9 days
7. **A surgical wound resulting from an accidental injury encountered within 4 hours is classified as:**
   A. Clean wound (Class 1)
   B. Clean-contaminated wound (Class 2)
   C. Contaminated wound (Class 3)
   D. Dirty wound (Class 4)

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Shock and Fluid Resuscitation

1. **Which of the following is a recognized complication of massive blood transfusion?**
   A. Hyperthermia, hyperkalemia, hypercalcemia, and coagulopathy
   B. Hypothermia, hyperkalemia, hypercalcemia, and coagulopathy
   C. Hypothermia, hyperkalemia, hypocalcemia, and coagulopathy
   D. Hyperkalemia, hypocalcemia, and normal coagulation profile
2. **All of the following are considered types of distributive shock EXCEPT:**
   A. Hypovolemic shock
   B. Neurogenic shock
   C. Anaphylactic shock
   D. Septic shock
3. **In a patient suffering from rhabdomyolysis following a crush or burn injury, which of the following is true regarding management?**
   A. The most effective treatment includes aggressive intravenous fluid resuscitation.
   B. All patients with rhabdomyolysis require immediate hemodialysis.
   C. Renal failure from rhabdomyolysis typically resolves spontaneously within 3 to 5 days.
   D. Severe hyponatremia is the most frequent electrolyte complication.
   E. Alkalinization of the urine to a pH between 8.0 and 9.0 is the primary treatment goal.
4. **What is the earliest clinical sign of ongoing occult blood loss?**
   A. Decreased systolic blood pressure
   B. Decreased hemoglobin levels
   C. Tachycardia
   D. Diaphoresis and pallor
5. **According to the Parkland formula, how much crystalloid fluid should be administered in the first 8 hours to a 70 kg man with 50% TBSA second-degree burns and 20% TBSA third-degree burns?**
   A. 7,000 ml
   B. 9,800 ml
   C. 14,000 ml
   D. 19,600 ml
6. **What is the standard fluid requirement for children suffering from significant burns?**
   A. 3 mL / kg / % TBSA
   B. 4 mL / kg / % TBSA
   C. 5 mL / kg / % TBSA
   D. 6 mL / kg / % TBSA
7. **Which type of shock is characterized by congested neck veins and an increased Central Venous Pressure (CVP)?**
   A. Cardiogenic shock
   B. Obstructive shock
   C. Hypovolemic shock
   D. Both A and B
8. **Which type of shock is associated with bradycardia and a decreased pulse rate?**
   A. Septic shock
   B. Cardiogenic shock
   C. Neurogenic shock
   D. Obstructive shock
9. **What is the most important parameter to follow when managing a patient in hypovolemic shock to prevent renal failure?**
   A. Pulse pressure
   B. Systolic blood pressure
   C. Urine output
   D. Body temperature
10. **During the management of major burns, the most reliable indicator of adequate fluid resuscitation is:**
    A. Increase in blood pressure

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B. Increase in body temperature
C. Achievement of adequate urine output
D. Normalization of pulse rate

11. **In the management of early septic shock, what is the first-line vasoconstrictor?**
A. Norepinephrine
B. Dopamine
C. Epinephrine
D. Dobutamine

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Major Trauma and Primary Survey

1. **For a road traffic accident victim, the first priority of management is given to which of the following injuries?**
   A. Open pneumothorax on the right side
   B. Tension pneumothorax on the left side
   C. Bleeding scalp laceration
   D. Fracture of the shaft of the femur
   E. Unstable fracture of the pelvis
2. **Thoracotomy is indicated in all of the following conditions EXCEPT:**
   A. Penetrating chest injuries
   B. Rapidly accumulating hemothorax
   C. Massive air leak
   D. Pulmonary contusion
3. **The heart is located in the:**
   A. Anterior mediastinum
   B. Posterior mediastinum
   C. Superior mediastinum
   D. Middle mediastinum
4. **All of the following manifestations of a hemothorax are true EXCEPT:**
   A. Chest pain
   B. Dyspnea
   C. Decreased breath sounds
   D. Hyperresonance on the involved side
5. **Which of the following life-threatening conditions requires urgent chest tube insertion?**
   A. Cardiac tamponade
   B. Lung contusion
   C. Tension pneumothorax
   D. Diaphragmatic rupture
6. **In a patient with pneumothorax and shock, the first-line management is:**
   A. Insertion of a chest tube
   B. Oxygen inhalation
   C. Mechanical ventilation
   D. Needle decompression
7. **On a CT scan, an acute epidural hemorrhage typically appears as:**
   A. A concave lens shape
   B. A low-density area
   C. A high-density (biconvex) area
   D. A crescent-shaped area
8. **What is the appropriate management for a patient with a mild depressed skull fracture, no brain damage, and normal intracranial pressure (ICP)?**
   A. Immediate operative intervention
   B. Conservative management and preparation for surgery
   C. Discharge to home
9. **A 27-year-old man sustains a single gunshot wound to the left thigh. In the ER, he is noted to have a large hematoma on his medial thigh and complains of paresthesia in his left foot. On examination, distal pulses are weak, and he is unable to move his foot. What is the most appropriate initial management?**
   A. Urgent angiography
   B. Immediate exploration and repair in the operating room
   C. Fasciotomy of the anterior compartment of the calf
   D. Reassessment after the treatment of shock
10. **A pedestrian is hit by a speeding car. Radiologic studies, including a retrograde urethrogram (RUG), reveal a pelvic fracture with a rupture of the urethra superior to the urogenital diaphragm. What is the most appropriate next step?**
    A. Immediate percutaneous nephrostomy

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B. Immediate placement of a Foley catheter through the urethra
C. Immediate reconstruction of the ruptured urethra
D. Immediate exploration of the pelvis for hemorrhage control and hematoma drainage
E. Placement of a suprapubic cystostomy tube

11. **A trauma victim with an unstable pelvis and a blood pressure of 80/60 mmHg is brought to the ER. X-rays confirm a pelvic fracture. What is the most appropriate next step to control the bleeding?**
A. Application of a pelvic binder
B. External fixation
C. Angiographic embolization
D. All of the above
12. **A 25-year-old woman arrives at the ER following an automobile accident. She is acutely dyspneic with a respiratory rate of 60 breaths per minute. Breath sounds are markedly diminished on the right side. What is the best first step in management?**
A. Obtain a chest X-ray
B. Draw arterial blood for blood-gas determination
C. Decompress the right pleural space
D. Perform pericardiocentesis
13. **According to the "soft signs" of vascular injury, which of the following is true?**
A. Presence of a small or moderate-sized hematoma
B. Diminished distal pulse
C. Proximity of a penetrating wound to a major vascular structure
D. All of the above
14. **A 37-year-old female presents with a stab wound to the right chest lateral to the sternal border. Her HR is 130 bpm, BP is 74/58 mmHg, and physical exam reveals jugular venous distention and muffled heart sounds. What is the most likely diagnosis and appropriate treatment?**
A. Tension pneumothorax; right thoracotomy
B. Tension pneumothorax; right tube thoracostomy
C. Cardiac tamponade; pericardial window
D. Cardiac tamponade; left tube thoracostomy
15. **A 21-year-old man presents with a gunshot wound to the right chest. A chest tube is placed, initially draining 1200 mL of blood. After resuscitation with 2 L of Ringer's lactate, his vitals normalize. Four hours later, the total chest tube output reaches 2300 mL. What is the next most appropriate step?**
A. Obtain a chest CT
B. Check STAT hemoglobin and hematocrit
C. Perform a right thoracotomy
D. Perform a left anterolateral thoracotomy
E. Admit to the ICU for continuous monitoring
16. **A 32-year-old female is involved in a motor vehicle crash. CT shows a grade IV liver laceration with no active extravasation. Six hours after admission, her HR increases to 100 bpm and BP is 105/80 mmHg. What is the next most appropriate step?**
A. Exploratory laparotomy
B. Angiography
C. Repeated FAST exam
D. Diagnostic laparoscopy
E. Repeated hemoglobin determination
17. **A 22-year-old man falls from a ladder and sustains a grade II splenic laceration. Initially stable, six hours later his HR is 104 bpm, BP is 100/68 mmHg, and hemoglobin has dropped**

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from 12.3 g/dL to 9.1 g/dL. What is the next step in management?
A. Exploratory laparotomy
B. Angiography
C. Continue serial examinations
D. Transfuse two units and continue serial examinations

18. **A 23-year-old male with multiple gunshot wounds to the abdomen and leg has a grade IV liver laceration and vascular injury. His temperature is 36°C, and he is on vasopressors. Which of the following is a trigger to transition to damage control surgery?**
A. Body temperature less than 37°C
B. Arterial pH less than 7.2
C. Hemoglobin less than 7 g/dL
D. Oxygen saturation less than 90%

19. **A 52-year-old male arrives at the ED unstable (BP 80/60, HR 125) following a head-on collision. Workup reveals an open-book pelvic fracture. Despite 2 L of crystalloid, he remains unstable. Which technique can be used to control the pelvic bleeding?**
A. Interventional radiology (IR) angiogram
B. Preperitoneal packing
C. External fixator
D. Pelvic binder
E. All of the above

20. **A 32-year-old male presents after a head injury. He opens his eyes to a sternal rub, localizes to pain, and makes only groaning sounds. What is his Glasgow Coma Scale (GCS) score?**
A. 7
B. 8
C. 9
D. 10
E. 11

21. **A 58-year-old man presents with a right-sided hemothorax after a fall. A chest tube initially drains 700 mL of blood. Over the next 4 hours, he continues to drain 300 mL/hour. What is the definitive treatment?**
A. Platelet transfusion
B. Fresh-frozen plasma transfusion
C. Placement of a second chest tube
D. Thoracotomy in the operating room

22. **The principles of damage control surgery include which of the following?**
A. Primary focus on the control of hemorrhage and contamination only
B. Avoiding the use of temporary abdominal closures
C. Appropriate triage based upon injuries and available resources
D. Mandatory colostomy for all colon injuries
E. Definitive repair of all abdominal injuries in the first operation

23. **A 21-year-old passenger in a motor vehicle collision presents with dyspnea, subcutaneous emphysema, and decreased breath sounds. Chest X-ray reveals pneumomediastinum and a right-sided pneumothorax. What is the most likely diagnosis?**
A. Tension pneumothorax
B. Open pneumothorax
C. Tracheobronchial injury
D. Esophageal injury

24. **Which statement is correct regarding the management of a mangled extremity?**
A. The patient requires angiography prior to going to the operating room.
B. A mangled extremity severity score (MESS) ≥ 7 is highly predictive of the need for amputation.
C. In a hemodynamically unstable patient, definitive vascular repair should be completed before other

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injuries.
D. Bony injury should be reduced and stabilized prior to definitive vascular repair.
E. Optimal maximum time to surgery should be less than 24 hours from injury.

25. **Treatment for a flail chest includes which of the following?**
A. Pain control, chest physiotherapy, and close observation
B. Routine intubation and mechanical ventilation with PEEP
C. Stabilization of the chest wall with sandbags
D. Stabilization with towel clips

26. **In a road traffic accident (RTA), the presence of a "seat belt sign" should raise suspicion for which of the following injuries?**
A. Fracture of the clavicle and damage to the small intestine, mesentery, stomach, or duodenum
B. Fracture of the lower ribs and rupture of the liver or spleen
C. Head and cervical spine injuries
D. Sternal and dorsal spine injuries

27. **A 30-year-old male presents after a motorcycle crash. He is stable, but a cystogram demonstrates a bladder injury. Which combination of injury and management is correct?**
A. Extraperitoneal bladder injury requires the operating room for primary repair.
B. Extraperitoneal bladder injury requires suprapubic catheter placement.
C. Intraperitoneal bladder injury requires the operating room for primary repair.
D. Intraperitoneal bladder injury requires maintenance of a Foley catheter only.

28. **During the placement of a central venous catheter in the right subclavian vein, a patient suddenly becomes tachycardic and hypotensive due to a suspected air embolism. What is the best next maneuver?**
A. Decompression of the right chest with a needle
B. Placement of a right chest tube
C. Withdrawal of the central venous catheter several centimeters
D. Placement of the patient in the left lateral decubitus Trendelenburg position
E. Bilateral “clamshell” thoracotomy

29. **Which of the following is considered a false statement regarding renal and urinary tract injuries?**
A. Grade 3 cortical lacerations are less than 1 cm in depth.
B. Blunt trauma is the most common mechanism of injury.
C. Iatrogenic injuries frequently occur during pelvic or abdominal surgery.
D. Renal injuries are rarely associated with other intra-abdominal organ injuries.

30. **What is the recommended treatment for a massive hemothorax?**
A. Needle decompression
B. Needle decompression followed by an intercostal chest tube
C. Occlusive dressing fixed on three sides only
D. Chest tube insertion followed by a thoracotomy if bleeding persists

31. **What is the recommended treatment for a tension pneumothorax?**
A. Urgent needle decompression followed by intercostal chest tube insertion
B. Occlusive dressing fixed on three sides only
C. Immediate formal thoracotomy
D. Observation and serial chest X-rays

32. **What are the management priorities in major trauma (the**

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Primary Survey)?
A. CBC and chest X-ray
B. Clinical examination and detailed history
C. Airway, Breathing, Circulation, Disability, and Exposure
D. Immediate transfer to the operating room

33. **What is the definition of a massive hemothorax in the adult population?**
A. > 500 mL of blood in the pleural space
B. > 1000 mL of blood in the pleural space
C. > 1500 mL of blood in the pleural space
D. > 2500 mL of blood in the pleural space
34. **A 20-year-old man with a head injury opens his eyes to voice, uses inappropriate words, and demonstrates abnormal flexion. What is his Glasgow Coma Scale (GCS) score?**
A. 6
B. 9
C. 11
D. 12
35. **In a 4-year-old hypotensive trauma victim where peripheral IV access is unsuccessful, the next best access site is:**
A. Subclavian vein catheterization
B. Femoral vein catheterization
C. Intraosseous catheterization
D. Jugular vein catheterization
36. **A patient presents with motor function, pain, and temperature sensation preserved in the lower extremities but diminished in the upper extremities. This is characteristic of:**
A. Brown-Séquard syndrome
B. Anterior cord syndrome
C. Central cord syndrome
D. Complete cord transection
37. **What are the ABCs of the primary survey in trauma management?**
A. Assess, Treatment, and Evaluation
B. Accident history, Past history, and Family history
C. Airway, Breathing, and Circulation
D. Airway, Blood pressure, and Cervical spine
38. **Respiratory distress, hypotension, tracheal deviation away from the affected side, and lack of breath sounds on the affected side suggest:**
A. Simple pneumothorax
B. Tension pneumothorax
C. Open pneumothorax
D. Massive hemothorax
39. **In trauma, "Zone 1" of the neck is defined as the area:**
A. Inferior to the clavicles encompassing the thoracic outlet structures
B. Between the thoracic outlet and the angle of the mandible
C. Above the angle of the mandible
D. Behind the sternocleidomastoid muscle
40. **Anterior truncal gunshot wounds between the fourth intercostal space and the pubic symphysis with suspected peritoneal penetration should undergo:**
A. Exploratory laparotomy
B. FAST exam
C. CT scan
D. Diagnostic peritoneal lavage (DPL)
41. **In a traumatic patient, cervical spine immobilization should be performed during which phase of the primary survey?**
A. Airway
B. Breathing
C. Circulation
D. Disability
42. **The classic Beck's triad for cardiac tamponade includes:**
A. Distended neck veins, muffled heart tones, and hypotension
B. Distended neck veins, absent

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breath sounds, and hyperresonance
C. Hypotension, tachycardia, and tracheal deviation
D. Muffled heart tones, hypertension, and bradycardia

43. **A 20-year-old man with head trauma opens his eyes to voice, uses inappropriate words, and shows abnormal flexion. What is his Glasgow Coma Scale (GCS) score?**
A. 3
B. 6
C. 9
D. 12

44. **Which spinal cord syndrome is characterized by preserved motor function, pain, and temperature sensation in the lower extremities but diminished function in the upper extremities?**
A. Brown-Séquard syndrome
B. Anterior cord syndrome
3. Central cord syndrome
4. Complete transection

45. **The earliest clinical sign of ongoing occult blood loss is:**
A. Decreased systolic blood pressure
B. Tachycardia
C. Decreased hemoglobin
D. Diaphoresis and pallor

46. **Neck Zone 1 is anatomically defined as the area:**
A. Inferior to the clavicles encompassing the thoracic outlet structures
B. Between the thoracic outlet and the angle of the mandible
C. Above the angle of the mandible
D. Posterior to the sternocleidomastoid muscle

47. **What is the temporary management for a "sucking" open chest wound?**
A. Needle decompression
B. Chest tube through the wound
C. Occlusive dressing taped on three sides
D. Endotracheal intubation and positive pressure ventilation

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Surgical Infections and Antibiotics

1. **What is the most common cause of empyema?**
   A. Pneumonia process in the underlying lung
   B. Rupture of an emphysematous bulla
   C. Penetrating injury of the chest
   D. Subphrenic abscess
   E. Rupture of the thoracic esophagus
2. **All of the following are indications for open decortication EXCEPT:**
   A. Persistent sepsis
   B. Complicated empyema
   C. Failure of lung re-expansion
   D. Stage 3 empyema
   E. Exudative stage empyema
3. **All of the following manifestations of empyema are true EXCEPT:**
   A. Chest pain
   B. Dyspnea
   C. Cough
   D. Fever
   E. Hyperresonance on the involved side
4. **Which of the following statements regarding the treatment of empyema is FALSE?**
   A. Treat the underlying cause.
   B. Antibiotics alone or with repetitive thoracentesis are used in the exudative stage.
   C. Antibiotics and chest tube insertion or thoracoscopic decortication are used in the fibrinopurulent stage.
   D. Antibiotics and decortication are used in the organizational stage.
   E. Video-assisted thoracic surgery (VATS) is indicated in any empyema stage.
5. **The most common site for an intra-abdominal abscess collection is the:**
   A. Pelvic cavity
   B. Subphrenic space
   C. Morrison's pouch
   D. Right paracolic gutter
   E. Left paracolic gutter
6. **Regarding preoperative antibiotic prophylaxis, which of the following statements is true?**
   A. A single dose should be given one hour before surgery, and a booster dose may be given for lengthy operations.
   B. Antibiotics should be administered only after the skin incision.
   C. Antibiotics are only required for clean-contaminated wounds.
   D. Prophylaxis should be continued for at least five days postoperatively.
7. **Which of the following is the treatment of choice for an amoebic liver abscess and is successful in 95% of cases?**
   A. Surgical drainage due to high risk of rupture
   B. Medical treatment with albendazole for 14 days
   C. Metronidazole 750 mg three times a day for 7 to 10 days
   D. Long-term IV antibiotic therapy for at least 8 weeks
8. **Which statement is true regarding the treatment of a pyogenic liver abscess?**
   A. It always requires surgical resection.
   B. Albendazole is the primary medical treatment.
   C. It is primarily managed with IV antibiotic therapy and percutaneous drainage.
   D. It is usually a complication of a

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hydatid cyst.

9. **What is the most appropriate timing for the administration of prophylactic antibiotics?**
   A. 1 hour before surgery
   B. 1 hour after surgery
   C. 24 hours before surgery
   D. 24 hours after surgery
10. **Prophylactic antibiotics are indicated for which surgical site classification?**
   A. Clean-contaminated (Class II)
   B. Contaminated (Class III)
   C. Wounds where foreign material is implanted
   D. All of the above
11. **All of the following are recognized etiologies or risk factors for Surgical Site Infection (SSI) EXCEPT:**
   A. Prolonged surgical procedure
   B. Anemia and malnutrition
   C. Immunosuppression (diabetes, uremia, malignancy)
   D. Smoking
   E. Early ambulation
12. **Clostridium difficile colitis is best treated with:**
   A. IV Vancomycin
   B. Oral Vancomycin
   C. IV Metronidazole
   D. Oral Amoxicillin
13. **Which of the following is true regarding Tetanus?**
   A. Caused by gram-negative aerobic bacteria
   B. The first symptoms include pain and tingling at the injury site followed by trismus and risus sardonicus
   C. It typically presents as invasive necrotizing fasciitis
   D. It is caused by a mixture of aerobic and anaerobic bacteria

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Burns and Principles of Plastic Surgery

1. **A 25-year-old man sustains burns in an apartment fire. He has blistering of the face and chest, and circumferential frank charring of the right upper extremity with decreased capillary refill. He is hypotensive and tachycardic. What is the most appropriate initial management of his wounds?**
   A. Application of topical antibiotics
   B. Immediate excision of facial and hand burns
   C. Escharotomy of the right upper extremity
   D. Split-thickness skin grafts over third-degree areas
2. **Which of the following statements regarding skin grafts is FALSE?**
   A. A skin graft is the transfer of skin tissue from one area to another without its own blood or nerve supply.
   B. Primary contraction is most significant in full-thickness grafts.
   C. Thick split-thickness grafts provide the best cosmetic results compared to full-thickness grafts.
   D. Skin grafts can be stored frozen in a skin bank for up to 5 years.
3. **Which of the following is an advantage of a skin flap compared to a skin graft?**
   A. Better blood supply and higher rate of "take."
   B. Provides better texture, bulk, and color match to the recipient area.
   C. Allows for early movement in the recipient area.
   D. All of the above.
   E. It requires a shorter hospitalization time.
4. **A 60-year-old man presents with a 6-mm basal cell carcinoma on the tip of his nose. He undergoes excision with repair of the defect using skin and subcutaneous tissue harvested from his earlobe. Which of the following terms most appropriately describes this form of reconstructive surgery?**
   A. Split-thickness graft
   B. Full-thickness graft
   C. Composite graft
   D. Pedicle flap
   E. Free flap
5. **A 45-year-old man presents with second and third-degree burns to the anterior surface of both arms and the entire right leg. What is his estimated Total Body Surface Area (TBSA) burned?**
   A. 25%
   B. 27%
   C. 29%
   D. 36%
6. **Which of the following is a definitive indication to transfer a patient to a specialized burn center?**
   A. A 45-year-old female with first-degree burns over 30% TBSA
   B. A 10-year-old female with third-degree burns over 4% TBSA
   C. A 21-year-old male with a chemical burn to the right hand
   D. A 71-year-old female with second-degree burns over 8% TBSA
7. **Which of the following describes a second-degree (partial-thickness) burn?**
   A. Involvement of the epidermis only; tissue is dry and red.
   B. Extension to the dermis with desquamation, blistering, and moist, painful tissue.

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C. Involvement of the entire dermis and subcutaneous fat; tissue is leathery and painless.
D. Involvement of underlying muscle and bone.

8. **What is the most common type of burn injury?**
   A. Contact burn
   B. Flame burn
   C. Flash burn
   D. Scald from hot water
9. **According to the Rule of Nines for children, the head accounts for what percentage of TBSA?**
   A. 9%
   B. 14%
   C. 18%
   D. 27%
10. **28. A 45-year-old man presents with second and third-degree burns to the anterior surface of both arms and the entire right leg. What is his estimated TBSA?**
    A. 18%
    B. 27%
    C. 36%
    D. 45%
11. **Which of the following is a definitive indication for transfer to a burn center?**
    A. 30% TBSA first-degree burn in an adult
    B. 4% TBSA third-degree burn in a child
    C. Chemical burn to the right hand
    D. 8% TBSA second-degree burn in an elderly patient
12. **Which of the following is FALSE regarding the depth of burns?**
    A. First-degree burns damage only the epidermis.
    B. Second-degree burns damage the epidermis and a portion of the dermis.
    C. Third-degree burns involve complete destruction of the epidermis and dermis.
    D. Full-thickness burns can heal spontaneously with simple epithelialization.
13. **All of the following are considered early complications of a major burn EXCEPT:**
    A. Hypovolemic shock
    B. Renal failure
    C. Neurogenic shock
    D. Marjolin’s ulcer

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Skin, Subcutaneous Tissues, and Reconstructive Surgery

1. **Basal cell carcinoma (rodent ulcer) typically spreads by:**
   A. Direct invasion
   B. Lymphatic spread
   C. Hematogenous (blood) spread
   D. All of the above
2. **Which of the following statements regarding skin grafts is FALSE?**
   A. Skin graft: Transfer of skin tissue from one area to another without its own blood or nerve supply.
   B. Autograft: Tissue transferred from one location to another on the same patient.
   C. Homograft: Tissue transfer between two genetically identical individuals (identical twins).
   D. Allograft: Tissue transfer between two genetically different members of the same species.
   E. Xenograft: Tissue transfer from a donor of one species to a recipient of another species.
3. **Advantages of a skin flap compared with a skin graft include all of the following EXCEPT:**
   A. Better blood supply and "take up"
   B. Provides texture, bulk, and color to the area
   C. Shorter duration of hospitalization
   D. Allows required movement in the recipient area
   E. Cosmetically superior results
4. **A 60-year-old man presents with a 6-mm basal cell carcinoma on the tip of his nose. He undergoes excision with repair using skin and subcutaneous tissue from his earlobe. Which term describes this reconstructive surgery?**
   A. Split-thickness graft
   B. Full-thickness graft
   C. Composite graft
   D. Pedicle flap
   E. Free flap
5. **A carcinoma arising in a site of long-standing irritation, such as a chronic granuloma, chronic ulcer, or old burn scar, is called:**
   A. Marjolin's ulcer
   B. Rodent ulcer
   C. Curling's ulcer
   D. Cushing's ulcer
6. **Which of the following is considered a contraindication regarding the pathological diagnosis of salivary gland lesions?**
   A. Open surgical biopsy of a major salivary gland
   B. Open surgical biopsy of a minor salivary gland
   C. Fine needle aspiration (FNA) of a major salivary gland
   D. Fine needle aspiration (FNA) of a minor salivary gland

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Vascular Surgery and Lymphatic Disorders

1. **All of the following are acceptable operative approaches for the management of thoracic outlet syndrome EXCEPT:**
   A. Scalenectomy
   B. Excision of a cervical rib
   C. Thoracoplasty
   D. First rib resection
   E. Division of anomalous fibromuscular bands
2. **All of the following are risk factors for deep vein thrombosis (DVT) EXCEPT:**
   A. Obesity
   B. A 40-year-old with congestive heart failure preparing for an appendectomy
   C. A 50-year-old female with malignant colon preparing for a colectomy
   D. A 25-year-old male preparing for an inguinal herniorrhaphy
   E. A 35-year-old with a spinal cord injury
3. **All of the following are risk factors for atherosclerosis EXCEPT:**
   A. Obesity
   B. Hyperlipidemia
   C. Smoking
   D. Hyperthyroidism
4. **The definitive treatment for acute embolic mesenteric ischemia is:**
   A. Observation
   B. Anticoagulation
   C. Thrombolysis
   D. Operative embolectomy
   E. Aspirin therapy
5. **The initial treatment for nonocclusive mesenteric ischemia (NOMI) is:**
   A. Observation
   B. Catheter infusion of papaverine
   C. Stenting to prevent further spasm
   D. Operative bypass of the SMA
   E. Intra-arterial balloon dilatation
6. **All of the following regarding chronic mesenteric artery ischemia are true EXCEPT:**
   A. Embolectomy is the primary surgical treatment.
   B. Atherosclerosis is the main cause.
   C. The main symptom is postprandial pain (abdominal angina).
   D. Physical signs include an upper abdominal bruit and cachexia.
   E. Diagnosis is confirmed by narrowing of vessels on aortography/angiography.
7. **Four days after suffering a myocardial infarction (MI), a 78-year-old woman suddenly develops severe diffuse abdominal pain. Examination shows the abdomen is soft and minimally tender. Hyperactive bowel sounds are present, and the ECG shows atrial fibrillation. What is the most likely diagnosis?**
   A. Mesenteric embolus
   B. Nonocclusive ischemic disease
   C. Perforated peptic ulcer
   D. Congestive heart failure
   E. Digoxin toxicity
8. **In the case of the 78-year-old woman with suspected mesenteric ischemia, the most appropriate diagnostic examination is:**
   A. Gastrografin upper GI series
   B. White blood cell count and serial abdominal examination
   C. Colonoscopy
   D. Diagnostic peritoneal lavage
   E. Angiography

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9. **A newborn girl with a family history of lymphedema presents with bilateral lower extremity swelling. What is the diagnosis?**
   A. Secondary lymphedema
   B. Lymphedema praecox
   C. Congenital lymphedema (Milroy's disease)
   D. Lymphedema tarda
   E. Meigs's syndrome
10. **Which of the following statements regarding lymphedema is true?**
   A. Primary lymphedema occurs in more than 5% of the population.
   B. Early treatment is usually successful.
   C. Early treatment primarily involves surgical drainage.
   D. Lymphedema fluid is relatively low in protein.
   E. Lymphedema often involves the muscle compartments.
11. **General therapeutic measures for lymphedema include all of the following EXCEPT:**
   A. Meticulous skin care
   B. Avoidance of injuries
   C. Continuous long-term antibiotic therapy
   D. Range-of-motion exercises of the extremities
   E. Maintenance of ideal body weight
12. **The Charles operation for lymphedema involves:**
   A. Primary lymphatic-to-nearby vein anastomosis
   B. Primary lymphatic-to-lymphatic anastomosis
   C. Transfer of tissue bearing lymphatics into the affected limb
   D. Staged subcutaneous excision underneath flaps
   E. Excision of skin, subcutaneous tissue, and deep fascia followed by skin grafting
13. **The most common cause of acquired arteriovenous (AV) fistula is:**
   A. Bacterial infections
   B. Fungal infections
   C. Blunt trauma
   D. Penetrating trauma
   E. Malignancy
14. **Which of the following statements about arteriovenous (AV) fistulas is correct?**
   A. Local features are characterized by the presence of a thrill and bruit.
   B. An AV fistula is best managed by simple ligation of the feeding vessels.
   C. The most common cause of an AV fistula is malignancy.
   D. Branham's (Nicoladoni's) sign is an increase in heart rate when the fistula is compressed.
15. **The term "chronic limb ischemia" (CLI) is reserved for patients with proven arterial occlusive disease and symptoms lasting more than:**
   A. 1 week
   B. 2 weeks
   C. 3 weeks
   D. 4 weeks
   E. 5 weeks
16. **Which of the following is NOT a classic clinical manifestation ("6 Ps") of acute arterial occlusion?**
   A. Paralysis
   B. Paresthesia
   C. Pallor
   D. Painless
   E. Pulselessness
17. **A 60-year-old man with a history of atrial fibrillation presents with a cyanotic, cold right lower extremity. From where did the embolus most likely originate?**
   A. An atherosclerotic plaque
   B. An abdominal aortic aneurysm
   C. The heart
   D. The lungs
   E. A paradoxical embolus source
18. **What is the most appropriate management for the 60-year-old man with acute limb ischemia and atrial fibrillation?**

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A. Embolectomy
B. Lumbar sympathectomy
C. Bypass surgery
D. Amputation
E. Arteriography

19. **A 65-year-old woman undergoes femoral embolectomy and leg fasciotomy. Following surgery, she presents with oliguria and red-colored urine. What is the most probable diagnosis?**
A. Hematuria secondary to heparin
B. Embolus of the renal artery
C. Myoglobinuria
D. Retroperitoneal hematoma
E. Hemoglobinuria

20. **Which of the following statements regarding arterial injury is true?**
A. All arterial injuries are associated with the absence of a palpable pulse.
B. Arteriography is always required to diagnose an arterial injury.
C. CT angiography is the preferred initial investigation.
D. Patients with critical limb ischemia have paralysis and paresthesia.
E. In multiple trauma patients, arterial injuries should always be repaired before any other injury is addressed.

21. **A man presents with claudication after walking one block. Examination reveals non-palpable distal pulses in the left foot and dry gangrene on the tip of the fifth toe. His ankle-brachial index (ABI) is 0.7. Which finding qualifies him for reconstructive arterial surgery?**
A. Ankle-brachial index of 0.7
B. Rest pain
C. Claudication
D. Absent palpable pulses
E. Toe gangrene

22. **Peripheral aneurysms most commonly occur in the:**
A. Femoral artery
B. Axillary artery
C. Popliteal artery
D. Brachial artery
E. Renal artery

23. **What is the most common clinical manifestation of a 5.5-cm infrarenal abdominal aortic aneurysm?**
A. Abdominal or back pain
B. Acute leak or rupture
C. Asymptomatic incidental finding on examination
D. Atheroembolism
E. Spontaneous thrombosis

24. **A middle-aged man is found to have a small pulsating mass at the level of the umbilicus during a routine abdominal examination. What is the best initial test to establish the diagnosis?**
A. Aortography
B. Ultrasound
C. Computed tomography (CT)
D. Magnetic resonance imaging (MRI)
E. Plain films of the abdomen

25. **What is the generally accepted reason to operate on an asymptomatic abdominal aortic aneurysm (AAA) in a healthy patient?**
A. Presence of the aneurysm regardless of size
B. Aneurysm with intramural thrombus
C. Asymptomatic aneurysm reaching 6 cm in diameter
D. Associated 2-cm iliac aneurysm
E. Patient with a 1.5-cm splenic artery aneurysm

26. **An 80-year-old man is found to have a large pulsatile abdominal mass. Which of the following is the most frequent and lethal complication of this condition?**
A. Rupture
B. Acute thromboembolism
C. Dissection

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D. High-output congestive heart failure
E. Myocardial infarction

27. **All of the following are true regarding chronic mesenteric ischemia EXCEPT:**
A. The most common cause is atherosclerosis.
B. The classic symptom is postprandial abdominal pain ("abdominal angina").
C. Clinical signs include an upper abdominal bruit and cachexia.
D. Diagnosis is confirmed by narrowing of the vessels on aortography.
E. The definitive surgical treatment is embolectomy.
28. **A 76-year-old woman with a history of myocardial infarction presents with sudden, diffuse abdominal pain. Her ECG shows atrial fibrillation (AF). Abdominal examination reveals a soft abdomen with minimal tenderness. What is the most likely diagnosis?**
A. Acute intestinal embolism
B. Non-occlusive intestinal ischemia
C. Congestive heart failure
D. Digoxin toxicity
29. **What is the most sensitive and specific investigation for the diagnosis of acute mesenteric ischemia?**
A. White blood cell count
B. Colonoscopy
C. Arteriography/CT Angiography
D. Upper GI barium series
30. **What is the most common site for a visceral artery aneurysm?**
A. Splenic artery
B. Renal artery
C. Popliteal artery
D. Hepatic artery
31. **A 65-year-old woman undergoes a femoral embolectomy and leg fasciotomy. Post-surgery, she develops oliguria and red-colored urine. Microscopic analysis shows no RBCs. What is the most likely diagnosis?**
A. Hematuria secondary to heparin
B. Embolus of the renal artery
C. Myoglobinuria
D. Retroperitoneal hematoma
E. Hemoglobinuria
32. **Which of the following is the most common cause of primary lymphedema presenting in adolescent girls?**
A. Lymphedema praecox
B. Lymphedema tarda
C. Congenital lymphedema (Milroy's disease)
D. Infections and infestations (e.g., Filariasis)
33. **The most frequent and significant clinical effect of an ascending aortic aneurysm is:**
A. Spontaneous rupture
B. Aortic valve insufficiency
C. Pressure on the trachea
D. Pressure on the superior vena cava
34. **All of the following statements regarding lymphatic anatomy are true EXCEPT:**
A. Lymph capillaries do not have valves.
B. Lymph vessels have valves similar to veins.
C. Lymph nodes are present in all tissues of the body, including the CNS.
D. Multiple afferent lymphatic vessels enter a lymph node, but only one efferent vessel leaves it.
35. **Which of the following is considered an early complication of an aortic aneurysm repair procedure?**
A. Intraoperative hemorrhage
B. Renal failure
C. Ischemic colitis
D. Paraplegia
E. Graft limb occlusion
36. **The thoracic duct provides lymphatic drainage for the entire**

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body EXCEPT the:
A. Right upper limb and right side of the head/neck
B. Left upper limb
C. Abdominal viscera
D. Left lower limb
E. Right lower limb

37. **What is the most appropriate diagnostic investigation for a patient suspected of having acute mesenteric ischemia?**
A. Gastrografin upper GI series
B. White blood cell count and serial examinations
C. Colonoscopy
D. CT Angiography

38. **Regarding compartment syndrome, which of the following is NOT true?**
A. It can result from a supracondylar fracture of the humerus.
B. Pallor and hypoesthesia are alarming signs.
C. Increased pressure in the compartment jeopardizes blood supply to muscles while nerves are always spared.
D. Fasciotomy is the required treatment.

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The Breast

1. **A 40-year-old woman presents with an itchy rash on the nipple-areola complex for one month. Examination shows crusting and ulceration of the nipple with surrounding erythema, but no palpable masses or lymphadenopathy. What is the most likely diagnosis?**
   A. Paget's disease of the breast
   B. Eczema
   C. Duct ectasia
   D. Inflammatory carcinoma
2. **A 68-year-old female has a 2 cm malignant breast mass with adhesion to the pectoralis major and axillary lymph node involvement, but no distant metastasis. What is the correct TNM staging?**
   A. T4N1M0
   B. T4N2M0
   C. T2N1M0
   D. T3N1M0
3. **Which rare, highly malignant breast tumor is characterized by rapid growth and invasion of the dermal lymphatic plexus?**
   A. Paget's disease of the breast
   B. Inflammatory carcinoma of the breast
   C. Cystosarcoma phyllodes
   D. Fibroadenoma
4. **What is the best management option for lobular carcinoma in situ (LCIS)?**
   A. Breast-conserving surgery followed by radiotherapy
   B. Close clinical follow-up and observation
   C. Modified Radical Mastectomy (MRM)
   D. Neoadjuvant chemotherapy followed by mastectomy
5. **What is the most appropriate treatment for a recurring cyst in a patient with fibrocystic changes of the breast?**
   A. Reassurance after excluding malignancy
   B. Excision biopsy
   C. Repeated aspiration
   D. Wide local excision with a 1 cm safety margin
6. **How is the diagnosis of Paget's disease of the breast definitively established?**
   A. Biopsy of the nipple/areolar erosion
   B. Clinical examination alone
   C. Mammography
   D. MRI of the breast
7. **Which of the following is true regarding Phyllodes tumors?**
   A. They were previously known as cystosarcoma phyllodes.
   B. They are classified as benign, borderline, or malignant.
   C. They have a high growth rate and may resemble a large fibroadenoma.
   D. All of the above
8. **Regarding ductal carcinoma in situ (DCIS), all of the following are true EXCEPT:**
   A. It often shows microcalcifications on mammography.
   B. If left untreated, it can progress to invasive carcinoma.
   C. It is typically treated by clinical follow-up alone without radiotherapy.
   D. It is a marker of increased risk for developing invasive cancer in either breast.
9. **What is the most common cause of nipple discharge?**
   A. Fibrocystic disease
   B. Duct ectasia

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C. Ductal papilloma
D. Ductal carcinoma

10. **Regarding the sentinel lymph node (SLN) in breast cancer, all of the following are true EXCEPT:**
A. It is the first lymph node in the axilla to be affected by metastases.
B. It is identified by injecting patent blue dye or a radioactive sulfur colloid.
C. If the SLN is negative for metastases, an axillary clearance is still mandatory.
D. It is indicated in patients with clinically negative (N0) axillary nodes.
11. **If a breast carcinoma remains enclosed within the myoepithelium and basement membrane, it is called:**
A. Carcinoma in situ
B. Proliferative mastopathy
C. Invasive carcinoma
D. Inflammatory carcinoma
12. **What is the most appropriate management for lobular carcinoma in situ (LCIS) found on stereotactic biopsy?**
A. Modified radical mastectomy
B. Chemotherapy and radiation
C. Frequent self-breast examinations and yearly screening mammograms
D. Breast-conserving surgery followed by mandatory radiotherapy
13. **Which of the following is an absolute contraindication for Breast-Conserving Therapy (BCT)?**
A. Small tumor (under 4 cm)
B. First or second-trimester pregnancy (due to contraindication of radiotherapy)
C. A lesion in a large breast
D. A solitary lesion in a single quadrant
14. **A 35-year-old woman has an ulcerated breast tumor with dilated veins. Microscopic examination shows branching ducts compressed into leaf-like patterns. What is the most likely diagnosis?**
A. Fibroadenoma
B. Cystosarcoma Phyllodes
C. Ductal carcinoma
D. Intraductal papilloma
15. **A 30-year-old woman has a 2.1 cm breast tumor. Ultrasonography shows no axillary lymphadenopathy or distant metastases. What is the TNM stage of this tumor?**
A. Stage I
B. Stage IIA
C. Stage IIB
D. Stage III
16. **Regarding the sentinel lymph node (SLN) in breast cancer, which statement is FALSE?**
A. It is the first lymph node in the axilla to receive drainage from the tumor.
B. It can be identified using patent blue dye or radioactive sulfur colloid.
C. If the SLN is negative for metastases, axillary clearance is generally not required.
D. A sentinel lymph node biopsy is indicated only when there is palpable, mobile axillary lymphadenopathy (N1).
17. **Which of the following is the most common diagnosis for a 58-year-old woman with a palpable breast mass that becomes more painful and nodular one week prior to menses?**
A. Duct ectasia
B. Fibrocystic changes
C. Intraductal papilloma
D. Invasive ductal carcinoma
18. **A 45-year-old woman is found to have stereotactic biopsy-proven Lobular Carcinoma In Situ (LCIS). There are no palpable masses or lymphadenopathy.**

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What is the most appropriate management?
A. Frequent self-breast examinations and yearly screening mammograms
B. Immediate systemic chemotherapy
C. Bilateral total mastectomy
D. Right total mastectomy with sentinel lymph node biopsy

19. **Which of the following is an absolute contraindication for Breast-Conserving Therapy (BCT)?**
A. Pregnancy (due to the contraindication of radiotherapy)
B. A tumor size of 4 cm
C. A 5 cm lesion in a very large breast
D. A solitary lesion in the upper outer quadrant
20. **Triple assessment of a breast mass involves comparing the results of:**
A. Clinical examination, mammography/ultrasound, and core-cut biopsy
B. Mammography, ultrasound, and MRI
C. Clinical examination, CT scan, and PET scan
D. Self-examination, family history, and biopsy
21. **What is the most common benign breast mass?**
A. Fibroadenoma
B. Ductal papilloma
C. Fibrocystic disease
D. Lipoma
22. **A 58-year-old woman presents with a palpable mass in the left breast that becomes more painful and nodular one week prior to menses. What is the most likely diagnosis?**
A. Duct ectasia
B. Fibrocystic changes
C. Intraductal papilloma
D. Ductal carcinoma
23. **A 30-year-old woman has a 2.1 cm breast tumor with no axillary lymphadenopathy or distant metastases. What is the clinical stage?**
A. Stage I
B. Stage IIA
C. Stage IIB
D. Stage III
24. **Regarding the sentinel lymph node (SLN) in breast cancer, which statement is FALSE?**
A. It is the first lymph node in the axilla to be affected by metastases.
B. It is identified using patent blue dye or radioactive sulfur colloid.
C. If the SLN is negative, an axillary clearance is still mandatory.
D. SLN biopsy is indicated in clinically N0 patients.

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Thyroid Gland and Endocrine Surgery

1. **A 35-year-old woman develops progressive neck swelling, stridor, and difficulty breathing several hours after a completion thyroidectomy. After successful intubation, what is the most appropriate next step?**
   A. Fiberoptic laryngoscopy to rule out vocal cord paralysis
   B. Administration of intravenous calcium
   C. Administration of broad-spectrum antibiotics
   D. Immediate wound exploration and evacuation of hematoma
2. **A 23-year-old woman on the second postoperative day after a total thyroidectomy complains of a tingling sensation in her hands and muscle cramps. What is the most appropriate initial management?**
   A. 10 mL of 10% magnesium sulfate intravenously
   B. Oral vitamin D supplementation
   C. 100 µg oral levothyroxine
   D. Intravenous infusion of calcium gluconate
3. **Which of the following is true regarding the anatomy of the right suprarenal gland?**
   A. It is crescent-shaped
   B. It lies anterior to the inferior vena cava
   C. It drains directly into the right renal vein
   D. It is supplied by three distinct arteries
   E. It is usually completely separated from the liver by the peritoneum
4. **A 52-year-old woman presents with hypertension, obesity, and new skin striae. You are concerned about possible Cushing syndrome. Which of the following is the most common cause?**
   A. Adrenocortical hyperplasia
   B. ACTH-producing pituitary tumor (Cushing's disease)
   C. Primary adrenal neoplasms
   D. Ectopic ACTH-secreting tumor
   E. Exogenous pharmacologic glucocorticoid use
5. **Preoperative preparation for a patient with pheochromocytoma should include all of the following EXCEPT:**
   A. Alpha-adrenergic blockers (e.g., phenoxybenzamine)
   B. Beta-adrenergic blockers (e.g., propranolol)
   C. Intravenous hydration to avoid volume depletion
   D. Systemic steroids to avoid adrenal insufficiency
   E. IV antibiotic administration within one hour of the operation
6. **All of the following are true regarding the "10% rule" of pheochromocytoma EXCEPT:**
   A. 10% are extra-adrenal
   B. 10% are familial
   C. 10% are unilateral
   D. 10% are malignant
   E. 10% are discovered incidentally
7. **A healthy-appearing man undergoes evaluation for persistent hypertension. Serum chemistry reveals hypokalemia, and imaging shows a unilateral adrenal mass. What is the most likely diagnosis?**
   A. Secondary hypercortisolism (Cushing disease)
   B. Primary hypercortisolism (Cushing syndrome)
   C. Hyperaldosteronism (Conn syndrome)

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D. Pheochromocytoma
E. Addison syndrome

8. **A 34-year-old woman presents with hypertension, generalized weakness, and polyuria. Her electrolyte panel is significant for hypokalemia. Given her presentation, which of the following is the best initial test?**
A. Plasma renin activity and plasma aldosterone concentration
B. Urine electrolytes
C. Plasma cortisol level
D. Overnight low-dose dexamethasone suppression test
E. 24-hour urinary aldosterone level
9. **A 45-year-old woman presents with hypertension, development of facial hair (hirsutism), and a 7-cm suprarenal mass. Which of the following is the most likely diagnosis?**
A. Myelolipoma
B. Cushing disease
C. Adrenocortical carcinoma
D. Pheochromocytoma
E. Carcinoid tumor
10. **What is the most common histological type of adrenal incidentaloma?**
A. Non-functional adenoma
B. Adrenocortical carcinoma
C. Pheochromocytoma
D. Adrenal cyst
E. Myelolipoma
11. **Which of the following is FALSE regarding the anatomy of the adrenal glands?**
A. They are paired organs composed of an outer cortex and an inner medulla.
B. They are situated at the upper poles of the kidneys in the retroperitoneal cavity.
C. The weight of a normal adult adrenal gland is approximately 5g.
D. They are supplied by one main artery and drained by three main veins.
E. The right adrenal vein drains into the inferior vena cava, while the left drains into the left renal vein.
12. **What is the most common cause of Cushing syndrome?**
A. Adrenal adenoma
B. Primary adrenal hyperplasia
C. Cushing disease (pituitary ACTH-producing adenoma)
D. Iatrogenic use of corticosteroids
E. Ectopic ACTH-producing tumor
13. **Which of the following is the most common cause of primary adrenal insufficiency (Addison's disease)?**
A. Autoimmune destruction
B. Tuberculosis (TB) adrenalitis
C. Secondary insufficiency due to decreased ACTH
D. Metastatic disease to the adrenal glands
14. **All of the following are indications for screening a patient for primary hyperaldosteronism EXCEPT:**
A. Persistent or resistant hypertension
B. Hypertension associated with spontaneous or diuretic-induced hypokalemia
C. Hypertension diagnosed before the age of 40
D. Hypertension in the presence of an adrenal incidentaloma
E. Hypertension in a patient with a family history of hyperaldosteronism
15. **Regarding thyroid neoplasms, which of the following statements is FALSE?**
A. Papillary, follicular, and undifferentiated carcinomas arise from follicular epithelium.
B. Medullary carcinoma arises from parafollicular C-cells and is associated with MEN II.
C. Malignant lymphoma of the thyroid arises from lymphoid elements.

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D. Papillary carcinoma is the most common type seen in regions with endemic goiter.

16. **Which statement regarding toxic goiter is true?**
A. Graves' disease occurs when the thyroid gland becomes hyperactive due to thyroid-stimulating antibodies (TSI).
B. Plummer's disease is characterized by a solitary toxic autonomous nodule.
C. Autonomous nodular toxicity is always caused by TSH deficiency.
D. Graves' disease is primarily a surgical condition in its early stages.
17. **All of the following are recognized complications of a total thyroidectomy EXCEPT:**
A. Bilateral complete recurrent laryngeal nerve injury leading to aphonia.
B. Bilateral partial recurrent laryngeal nerve injury leading to stridor.
C. Unilateral recurrent laryngeal nerve injury leading to hoarseness.
D. Superior laryngeal nerve injury leading to an increase in vocal pitch.
18. **Which of the following is FALSE regarding thyroid cancer investigations?**
A. Isotope scanning typically shows malignant nodules as "cold areas."
B. Ultrasound features suggestive of malignancy include hypoechoic texture and microcalcifications.
C. Fine-needle aspiration (FNA) can easily differentiate between follicular carcinoma and follicular adenocarcinoma.
D. Thyroglobulin is a marker for differentiated thyroid cancer, while calcitonin is a marker for medullary carcinoma.
19. **What is the most common type of adrenal incidentaloma?**
A. Non-functional adenoma
B. Adrenocortical carcinoma
C. Pheochromocytoma
D. Adrenal cyst
20. **Which of the following is FALSE regarding the adrenal glands?**
A. Adrenal glands are paired organs composed of a cortex and a medulla.
B. They are situated at the upper poles of the kidneys in the retroperitoneum.
C. The weight of a normal adrenal gland is approximately 50g.
D. The glands are supplied by three main arterial branches.
21. **What is the most common cause of Cushing syndrome?**
A. Adrenal adenoma
B. Primary adrenal neoplasms
C. Cushing's disease (pituitary ACTH-producing adenoma)
D. Iatrogenic use of corticosteroids
22. **A 35-year-old woman with a history of a previous right thyroidectomy for a benign nodule undergoes a completion thyroidectomy. Several hours postoperatively, she develops progressive swelling under the incision, stridor, and difficulty breathing. After successful orotracheal intubation, what is the most appropriate next step?**
A. Fiberoptic laryngoscopy to rule out bilateral vocal cord paralysis
B. Administration of intravenous calcium
C. Administration of broad-spectrum antibiotics
D. Urgent wound exploration and evacuation of hematoma
E. Administration of high-dose steroids and antihistamines
23. **A 58-year-old man presents with tachycardia, fever, confusion, and vomiting. Laboratory tests reveal markedly elevated T3 and T4 levels. He is diagnosed with a thyroid storm. What is the most**

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appropriate next step in management?
A. Emergent subtotal thyroidectomy
B. Emergent total thyroidectomy
C. Emergent hemodialysis
D. Administration of fluids, antithyroid drugs, β-blockers, iodine solution, and steroids
E. Emergent radiation therapy to the neck

24. **A 23-year-old woman undergoes a total thyroidectomy for carcinoma. On the second postoperative day, she complains of a tingling sensation in her hands and later develops muscle cramps. What is the most appropriate initial management?**
A. 10 mL of 10% magnesium sulfate intravenously
B. Oral vitamin D supplementation
C. 100 µg oral levothyroxine
D. Continuous infusion of calcium gluconate
25. **A 45-year-old woman presents with nervousness, sweating, tremors, and weight loss. A thyroid scan is performed. Which of the following patterns is most consistent with a hypersecreting (toxic) adenoma?**
A. Diffuse uptake throughout the entire gland
B. A single "hot" nodule with suppression of the rest of the gland
C. Multiple "cold" nodules
D. A single "cold" nodule in the lower lobe
E. Total absence of iodine uptake
26. **A 55-year-old woman presents with a 6-cm right thyroid mass and palpable cervical lymphadenopathy. FNA of a lymph node demonstrates the presence of psammoma bodies (calcified clumps of sloughed cells). What is the best management for this patient?**
A. Screening for pancreatic endocrine neoplasms and hypercalcemia
B. Total thyroidectomy with modified radical neck dissection
C. Right thyroid lobectomy followed by radioactive iodine therapy
D. Observation and TSH suppression
E. Right thyroid lobectomy only
27. **A 29-year-old woman is diagnosed with Graves' disease. She elects to undergo a thyroidectomy. After being rendered euthyroid with medications, which management strategy should be employed 10 days preoperatively to reduce the risk of a thyroid storm in the operating room?**
A. Administration of Lugol's iodine solution drops
B. Preoperative treatment with phenoxybenzamine
C. Preoperative treatment with propranolol
D. Twenty-four hours of corticosteroids
E. No other preoperative medication is required
28. **A 36-year-old woman, 20 weeks pregnant, presents with a 1.5-cm right thyroid mass. FNA suggests a papillary neoplasm. Which of the following treatments is contraindicated in this patient?**
A. Right thyroid lobectomy
B. Subtotal thyroidectomy
C. Total thyroidectomy
D. Total thyroidectomy with lymph node dissection
E. Radioactive iodine (131I) ablation
29. **A 63-year-old woman undergoes a total thyroidectomy, and final pathology reveals a 2-cm Hürthle cell carcinoma. What is the most appropriate postsurgical management?**
A. No further therapy is indicated

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B. Systemic chemotherapy
C. External beam radiotherapy
D. Radioiodine ablation
E. Combination of chemotherapy and radiotherapy

30. **A 51-year-old man presents with a 2-cm left thyroid nodule. A thyroid scan shows a "cold" lesion, and FNA cytology demonstrates follicular cells. What is the most appropriate initial surgical treatment?**
A. External beam radiation to the neck
B. Multidrug chemotherapy
C. Total thyroidectomy with prophylactic neck dissection
D. Thyroid lobectomy
E. TSH suppression by thyroid hormone

31. **All of the following statements regarding Gastrinoma (Zollinger-Ellison syndrome) are false EXCEPT:**
A. It is a rare tumor arising from non-beta islet cells that secretes excess gastrin.
B. The classic clinical feature is Whipple's triad.
C. The tumor is always benign.
D. It arises from the beta cells of the islets of Langerhans.

32. **A 34-year-old woman presents with recurrent fainting spells induced by fasting, which are relieved by glucose. Which findings are most consistent with the diagnosis of an insulinoma?**
A. Serum glucose > 50 mg/dL, elevated insulin, elevated C-peptide
B. Serum glucose > 50 mg/dL, elevated insulin, decreased C-peptide
C. Serum glucose < 50 mg/dL, elevated insulin, elevated C-peptide
D. Serum glucose < 50 mg/dL, elevated insulin, decreased C-peptide
E. Serum glucose < 50 mg/dL, decreased insulin, decreased C-peptide

33. **A 53-year-old woman presents with weight loss, diabetes mellitus, anemia, and a persistent rash (necrolytic migrating erythema) on her lower abdomen. CT shows a large mass in the tail of the pancreas. What is the diagnosis?**
A. VIPoma
B. Glucagonoma
C. Somatostatinoma
D. Insulinoma
E. Gastrinoma

34. **Which of the following tests is best for confirming a diagnosis of gastrinoma?**
A. 24-hour urine gastrin level
B. Secretin stimulation test
C. Serum glucagon level
D. 24-hour urine secretin level
E. Serum glucose to insulin ratio

35. **A patient with MEN1 is suspected to have a gastrinoma. Where is the most likely location for this tumor?**
A. Fundus of the stomach
B. Antrum of the stomach
C. Within the "Gastrinoma Triangle" (junction of the 2nd and 3rd duodenum, neck/body of pancreas, and cystic/CBD junction)
D. Tail of the pancreas
E. Within the triangle formed by the liver edge and the common hepatic duct

36. **Regarding the anatomy of the thyroid gland, which of the following is incorrect?**
A. The middle thyroid vein drains into the internal jugular vein.
B. The inferior laryngeal artery arises directly from the external carotid artery.
C. The thyroid ima artery arises from the aorta or innominate artery in 1–4% of people.
D. Berry’s ligament attaches the thyroid lobe to the cricoid and thyroid cartilages.

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37. **Which statement regarding the recurrent laryngeal nerve (RLN) is correct?**
A. The left RLN lies in front of the subclavian artery.
B. The right RLN loops below the arch of the aorta.
C. The RLN innervates all intrinsic muscles of the larynx except the cricothyroid.
D. The RLN provides sensory innervation to the larynx above the vocal cords.
38. **What is the appropriate initial medical management for a patient diagnosed with a thyroid storm?**
A. Emergent total thyroidectomy
B. Emergent hemodialysis
C. Fluids, antithyroid drugs, β-blockers, iodine solution, and steroids
D. Radioactive iodine ablation
39. **A 29-year-old woman presents with a painful goiter, difficulty swallowing, and a recent history of an upper respiratory tract infection. Laboratory results show high ESR and a WBC of 14,000. What is the most likely diagnosis?**
A. Autoimmune (Hashimoto's) thyroiditis
B. Cat-scratch fever
C. Subacute (De Quervain's) thyroiditis
D. Graves' disease
40. **After a total thyroidectomy for follicular thyroid carcinoma, which is the most sensitive test for monitoring tumor recurrence?**
A. Neck ultrasound
B. Serum thyroglobulin levels
C. Serum T3 and T4 levels
D. Radioactive iodine scan
41. **Which of the following is an extrathyroidal manifestation of Graves' disease?**
A. Vitiligo
B. Pretibial myxedema
C. Exophthalmos
D. All of the above
42. **During thyroidectomy, ligation of the superior thyroid artery too far away from the thyroid capsule risks injury to which nerve?**
A. Recurrent laryngeal nerve
B. External branch of the superior laryngeal nerve
C. Internal branch of the superior laryngeal nerve
D. Ansa cervicalis
43. **Following a thyroidectomy, a patient's right vocal cord is found in a paramedian position. This is most likely due to paralysis of which nerve?**
A. Recurrent laryngeal nerve
B. External branch of the superior laryngeal nerve
C. Internal branch of the superior laryngeal nerve
D. Glossopharyngeal nerve
44. **A patient with a long history of Hashimoto's thyroiditis who develops a rapidly enlarging goiter should be evaluated for:**
A. Thyroid lymphoma
B. Follicular carcinoma
C. Papillary carcinoma
D. Medullary carcinoma
45. **Which of the following is true regarding follicular carcinoma of the thyroid?**
A. Its major route of spread is hematogenous.
B. It is typically treated with hemithyroidectomy alone.
C. It is the most common thyroid cancer in children.
D. It arises from the parafollicular C-cells.
46. **Regarding the anatomy of the thyroid gland, which of the following is INCORRECT?**
A. The middle thyroid vein drains into the internal jugular vein.
B. The inferior laryngeal artery

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arises directly from the external carotid artery.
C. The thyroid ima artery arises from the aorta in about 1-4% of the population.
D. Berry's ligament attaches the thyroid lobe to the cricoid and thyroid cartilages.

47. **Which statement regarding the recurrent laryngeal nerve (RLN) is correct?**
A. The left RLN loops around the subclavian artery.
B. The right RLN loops below the arch of the aorta.
C. The RLN innervates all intrinsic muscles of the larynx except the cricothyroid.
D. The RLN provides sensation to the larynx above the vocal cords.
48. **After a total thyroidectomy, a patient with follicular thyroid carcinoma should be monitored for recurrence using which test?**
A. Neck ultrasound
B. Serum thyroglobulin
C. Serum T3 and T4 levels
D. Iodine-131 scan
49. **During a thyroidectomy, ligation of the superior thyroid artery more than one centimeter away from the capsule risks injuring which nerve?**
A. Recurrent laryngeal nerve
B. External branch of the superior laryngeal nerve
C. Internal branch of the superior laryngeal nerve
D. Ansa cervicalis
50. **Which type of thyroid carcinoma is the most common?**
A. Papillary
B. Follicular
C. Medullary
D. Anaplastic
51. **Which of the following is true regarding thyroid neoplasms?**
A. Papillary and follicular carcinomas arise from parafollicular C-cells.
B. Medullary carcinoma arises from follicular epithelium and is associated with MEN II.
C. Thyroid lymphoma arises from lymphoid elements.
D. Papillary carcinoma is the rarest type seen in endemic goiter regions.
52. **Which of the following is true regarding follicular thyroid carcinoma?**
A. It primarily spreads through the lymphatic system.
B. Its major route of spread is hematogenous.
C. It is typically treated with hemithyroidectomy alone.
D. It is the most common thyroid malignancy in children.
53. **Regarding Graves' disease, which of the following is NOT an extrathyroidal manifestation?**
A. Vitiligo
B. Pretibial myxedema
C. Exophthalmos
D. Myxedema coma
54. **All of the following are true regarding pheochromocytoma EXCEPT:**
A. It is a tumor of the adrenal medulla derived from chromaffin cells.
B. 10% of cases are malignant.
C. 90% of cases are discovered incidentally.
D. 10% of cases occur in children.
55. **What is the most common histologic type of adrenal incidentaloma?**
A. Nonfunctional adenoma
B. Adrenocortical carcinoma
C. Pheochromocytoma
D. Adrenal cyst

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Esophagus and Portal Hypertension

1. **The anatomical landmark used to differentiate between the upper and lower gastrointestinal tract is the:**
   A. First part of the duodenum
   B. Ligament of Treitz
   C. Triangular ligament
   D. Ligamentum teres
   E. Ileocecal valve
2. **A 61-year-old woman with a history of unstable angina complains of hematemesis after retching and vomiting following a night of binge drinking. Endoscopy reveals a longitudinal mucosal tear at the gastroesophageal junction which is not actively bleeding. Which of the following is the next recommended step in management?**
   A. Angiography with embolization
   B. Balloon tamponade
   C. Exploratory laparotomy, gastrotomy, and oversewing of the tear
   D. Systemic vasopressin infusion
   E. Reassurance and expectant management
3. **The most common cause of upper gastrointestinal (GIT) bleeding is:**
   A. Mallory-Weiss syndrome
   B. Peptic ulcer disease
   C. Gastric neoplasm
   D. Esophageal varices
   E. Trauma
4. **If measures like endoscopic banding and sclerotherapy fail to stop bleeding from esophageal varices, which procedure is recommended?**
   A. TIPS (Transjugular Intrahepatic Portosystemic Shunt)
   B. Portacaval shunt
   C. Hassab-Khairy procedure (Porto-azygos disconnection)
   D. Splenorenal anastomosis
5. **Which of the following management options for portal hypertension is associated with a low risk of encephalopathy while keeping portal blood flow intact?**
   A. End-to-side portacaval shunt
   B. Hassab-Khairy (Porto-azygos disconnection) operation
   C. TIPS
   D. Mesocolic shunt
6. **During the management of actively bleeding esophageal varices, which of the following medications is contraindicated?**
   A. Neomycin and Lactulose
   B. Vasopressin and Octreotide
   C. Vitamin K and Fresh Frozen Plasma
   D. Pethidine and Morphine
   E. Beta-blockers
7. **Which of the following is considered the best method to prevent the first bleeding episode in a patient with large esophageal varices and "red streaks" (stigmata of bleeding)?**
   A. Band ligation
   B. Sclerotherapy
   C. Non-selective beta-blockers
   D. TIPS
8. **Budd-Chiari syndrome results in which type of portal hypertension?**
   A. Intrahepatic post-sinusoidal
   B. Intrahepatic sinusoidal
   C. Intrahepatic pre-sinusoidal
   D. Extrahepatic post-sinusoidal
9. **In the management of actively bleeding esophageal varices, which of the following is contraindicated?**
   A. Vasopressin and octreotide

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B. Vitamin K and fresh frozen plasma
C. Pethidine and morphine
D. Neomycin and lactulose

10. **What is the recommended procedure if endoscopic and medical measures fail to stop bleeding from esophageal varices?**
A. TIPS (Transjugular Intrahepatic Portosystemic Shunt)
B. Portacaval shunt
C. Hassab-Khairy procedure (Porto-azygos disconnection)
D. Splenorenal anastomosis
11. **In a patient with acute hematemesis, the diagnosis is best established by:**
. A. Accurate history
B. Thorough physical examination
C. Barium swallow
D. Upper GI endoscopy
12. **A 61-year-old woman presents with hematemesis after severe retching and vomiting following binge drinking. Endoscopy reveals a non-bleeding longitudinal mucosal tear at the gastroesophageal junction. What is the next step?**
A. Angiography with embolization
B. Balloon tamponade
C. Reassurance and expectant management
D. Exploratory laparotomy and oversewing of the tear
13. **Which medication is contraindicated during the management of actively bleeding esophageal varices?**
A. Vasopressin
B. Octreotide
C. Vitamin K
D. Morphine

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Stomach and Duodenum

1. **Which of the following is true regarding the complications of gastric surgery?**
   A. Duodenal blow-out: This typically follows a Billroth I anastomosis.
   B. Early dumping: This is caused by an overshoot of insulin secretion leading to hypoglycemia 2-3 hours after meals.
   C. Alkaline reflux gastritis: Reflux of bile through a stoma causes diffuse gastritis and bilious vomiting; Roux-en-Y anastomosis provides good results.
   D. Late dumping: The patient complains of epigastric fullness and pain ending in explosive diarrhea immediately after a meal.
2. **Which operation for a chronic duodenal ulcer preserves gastric emptying and avoids the necessity of a drainage procedure?**
   A. Truncal vagotomy
   B. Selective vagotomy
   C. Highly selective vagotomy
   D. All of the above
3. **All of the following statements regarding Gastrinoma (Zollinger-Ellison syndrome) are FALSE EXCEPT:**
   A. It is a rare tumor arising from non-beta islet cells that secretes excess gastrin.
   B. The classic clinical features are defined by Whipple's triad.
   C. The tumor is usually benign; only a few cases are malignant.
   D. It arises from the beta cells of the islets of Langerhans.
4. **Which of the following is true regarding the surgical treatment of gastric cancer?**
   A. For tumors of the lower third of the stomach, a radical partial gastrectomy is performed with a Billroth II or Polya anastomosis.
   B. For tumors of the middle third of the stomach, a total radical gastrectomy is performed with a Roux-en-Y esophagojejunostomy.
   C. For tumors of the upper third of the stomach, an esophagogastrectomy is performed via a thoraco-abdominal incision to ensure safety margins.
   D. All of the above are true.
5. **Regarding the blood supply of the stomach, which of the following statements is true?**
   A. The left gastric artery is one of the three main branches of the celiac trunk.
   B. The right gastric artery is a branch of the gastroduodenal artery.
   C. The left gastroepiploic artery is a branch of the gastroduodenal artery.
   D. The right gastroepiploic artery arises directly from the hepatic artery.
6. **Which of the following statements regarding the metastasis of gastric carcinoma is true?**
   A. Transcoelomic spread to the ovaries is known as a Krukenberg tumor.
   B. Metastasis to the pouch of Douglas results in a palpable shelf known as a Blumer's shelf.
   C. A palpable left-sided supraclavicular lymph node is known as Troisier’s sign.
   D. Metastasis to the umbilicus is known as a Sister Mary Joseph node.
7. **An "hourglass stomach"**

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deformity is typically treated by:
A. Distal gastrectomy
B. Proximal gastrectomy
C. Total gastrectomy
D. Subtotal gastrectomy

8. **Gastrointestinal Stromal Tumors (GIST) arise from which of the following?**
A. Interstitial cells of Cajal
B. Mucosa
C. Submucosa
D. Serosa
9. **Which of the following is true regarding the complications of gastric surgery?**
A. Duodenal blow-out: This typically follows a Billroth I anastomosis.
B. Early dumping: This is caused by an overshoot of insulin secretion leading to hypoglycemia 2-3 hours after meals.
C. Alkaline reflux gastritis: Reflux of bile through a stoma causes diffuse gastritis and bilious vomiting; Roux-en-Y anastomosis provides good results.
D. Late dumping: The patient complains of epigastric fullness and pain ending in explosive diarrhea immediately after a meal.
10. **Which operation for a chronic duodenal ulcer preserves gastric emptying and avoids the necessity of a drainage procedure?**
A. Truncal vagotomy
B. Selective vagotomy
C. Highly selective vagotomy
D. All of the above
11. **All of the following statements regarding Gastrinoma (Zollinger-Ellison syndrome) are FALSE EXCEPT:**
A. It is a rare tumor arising from non-beta islet cells that secretes excess gastrin.
B. The classic clinical features are defined by Whipple's triad.
C. The tumor is usually benign; only a few cases are malignant.
D. It arises from the beta cells of the islets of Langerhans.
12. **Which of the following is considered a late complication of gastric surgery?**
A. Postoperative bleeding
B. Stomal obstruction
C. Dumping syndrome
D. Duodenal blowout
13. **Which of the following is correct regarding Zollinger-Ellison Syndrome (ZES)?**
A. It is a rare condition characterized by hypersecretion of gastrin.
B. It occurs most commonly within the "gastrinoma triangle."
C. It arises from non-beta islet cells of the pancreas or duodenum.
D. All of the above
14. **Dumping syndrome most commonly occurs after which procedure?**
A. Billroth I gastrectomy only
B. Billroth II gastrectomy only
C. Highly selective vagotomy
D. Following Billroth I or II gastrectomy and truncal vagotomy
15. **Which of the following are complications specifically associated with a Billroth II reconstruction?**
A. Duodenal blowout
B. Dumping syndrome
C. Bile reflux gastritis
D. All of the above
16. **What is the first clinical symptom typically seen in a duodenal blowout?**
A. Generalized peritonitis
B. Severe acute upper abdominal and lower chest pain
C. Epigastric fullness and nausea
D. Palpitations and tremors
17. **In the medical treatment of a chronic gastric ulcer, when is a follow-up endoscopy indicated?**
A. After 4 weeks of treatment regardless of symptoms

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B. After 6 weeks of treatment to document healing
C. Only if symptomatic improvement does not occur
D. Endoscopy is not required if the patient is asymptomatic

18. **Which type of gastric ulcer surgical management typically requires an added vagotomy?**
A. Type 1 (located on the lesser curvature)
B. Type 2 (body of stomach ulcer associated with a duodenal ulcer) and Type 3 (antral ulcer)
C. Type 4 (near the esophagogastric junction)
D. None of the above
19. **Which of the following statements regarding the metastases of gastric carcinoma is true?**
A. Transcoelomic spread to the ovaries is known as a Krukenberg tumor.
B. Metastases to the pouch of Douglas are known as Blumer's shelf.
C. A supraclavicular lymph node (Troisier's sign) is typically on the left (Virchow's node).
D. An umbilical metastasis is known as a Sister Mary Joseph node.
E. All of the above
20. **Which of the following complications is NOT typically associated with a Billroth II reconstruction?**
A. Duodenal blowout
B. Biliary gastritis
C. Post-vagotomy diarrhea
D. Dumping syndrome
21. **What is the standard Billroth I procedure?**
A. Anastomosis between the jejunum and the stomach
B. Partial gastrectomy followed by an anastomosis between the stomach and the duodenum
C. Partial gastrectomy followed by a Roux-en-Y anastomosis
D. Total gastrectomy
22. **What is the test of choice to document the successful eradication of H. pylori?**
A. Serology testing
B. Carbon-labeled urea breath test
C. Rapid urease assay (CLO test)
D. Histologic evaluation of gastric mucosa
23. **Which of the following is considered a late complication of gastric surgery?**
A. Bleeding
B. Stomal obstruction
C. Late dumping syndrome
D. Duodenal blowout
24. **Which of the following is true regarding highly selective vagotomy?**
A. The "crow's foot" nerves to the antrum are divided.
B. The "crow's foot" nerves to the antrum are spared.
C. It includes celiac and hepatic nerve ligation.
D. It requires a drainage procedure like pyloroplasty.
25. **Which type of gastric cancer metastasis is characterized by spread to the ovaries?**
A. Virchow’s node
B. Sister Mary Joseph nodule
C. Krukenberg tumor
D. Blumer’s shelf
26. **Metastasis of gastric carcinoma to the Pouch of Douglas is known as:**
A. Troisier’s sign
B. Blumer’s shelf
C. Irish node
D. Sister Mary Joseph nodule
27. **Which of the following is a symptom of late dumping syndrome?**
A. Epigastric fullness and nausea immediately after eating
B. Hypoglycemia occurring 2-3 hours after a meal
C. Bilious vomiting

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D. Explosive diarrhea immediately after eating

28. **Which test is used to document the successful eradication of H. pylori?**

A. Serology testing
B. Carbon-labeled urea breath test
C. Rapid urease assay (CLO test)
D. Histologic evaluation of gastric mucosa

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The Liver and Biliary System

1. **A 36-year-old male presents with RUQ pain, Murphy's sign, WBC 19,000/mm³, and gallstones with a gallbladder wall thickness of 5 mm on ultrasound. What is the most appropriate surgical treatment?**
   A. Percutaneous cholecystostomy tube placement
   B. Immediate cholecystectomy
   C. Cholecystectomy within 72 hours of admission
   D. Interval elective cholecystectomy in 3 months after symptoms resolve
2. **According to the Milan criteria, which of the following is a prerequisite for liver transplantation in patients with hepatocellular carcinoma (HCC)?**
   A. Child-Pugh Class C, no extrahepatic spread, a single lesion < 5 cm, or up to 3 nodules each < 3 cm.
   B. Any Child-Pugh class, no vascular invasion, and tumor confined to one lobe.
   C. Child-Pugh Class A, no vascular invasion, and tumor confined to one lobe.
   D. Resectable colorectal liver metastasis confined to one surgical lobe.
3. **Prerequisites for a major hepatectomy for liver tumors include:**
   A. Child-Pugh Class C and meeting Milan criteria
   B. Child-Pugh Class A, no extrahepatic spread, and no portal vein thrombosis
   C. Presence of solitary resectable colorectal metastasis
   D. Both B and C
4. **A 50-year-old woman has an 8 cm well-circumscribed liver cyst with a "rosette" appearance on ultrasound. What is the preferred treatment?**
   A. Pericystectomy
   B. Percutaneous catheter drainage
   C. Metronidazole therapy
   D. Albendazole therapy alone
5. **A 69-year-old woman with Child's C cirrhosis has an elevated AFP and a 4 cm liver mass with arterial enhancement and venous washout on CT. What is the next most appropriate step?**
   A. Percutaneous biopsy
   B. Neoadjuvant chemotherapy
   C. Liver resection
   D. Evaluation for liver transplant
6. **What is a reasonable indication for the operative intervention of a 7 cm asymptomatic hepatic hemangioma?**
   A. Significant pain or early satiety
   B. Spontaneous hemorrhage
   C. High-output cardiac failure
   D. Disseminated intravascular coagulation (DIC)
   E. All of the above
7. **A 45-year-old man presents with right upper quadrant abdominal pain and fever. Findings on CT scan suggest an Echinococcus cystic type III lesion. Which of the following is the most appropriate management?**
   A. Percutaneous catheter drainage
   B. Medical treatment with albendazole alone
   C. Medical treatment with steroids
   D. Medical treatment with metronidazole
   E. Total or partial pericystectomy
8. **Which of the following is NOT an**

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indication for surgery in a hepatic hydatid cyst?
A. Superficial cyst with a high risk of rupture
B. Secondary infected cyst
C. Pressure effects on adjacent structures
D. Calcified cyst
E. Cysto-biliary communication

9. **The most common clinical presentation of a hepatic hydatid cyst is:**
A. Asymptomatic
B. Biliary colic
C. Charcot's triad
D. Jaundice
E. Right hypochondrium pain

10. **Which of the following is part of Reynolds' Pentad?**
A. Charcot's triad (fever, jaundice, RUQ pain)
B. Altered mental status
C. Shock
D. All of the above

11. **Prerequisites for a major hepatectomy for liver tumors include:**
A. Child-Pugh Class C and meeting Milan criteria
B. Child-Pugh Class A, no extrahepatic spread, and no portal vein thrombosis
C. Presence of solitary resectable colorectal metastasis
D. Both B and C

12. **What is the most common mechanism leading to the presence of bacteria in the bile?**
A. Ascending infection from the duodenum
B. Hematogenous spread via the portal vein
C. Hematogenous spread via the hepatic artery
D. Lymphatic spread

13. **A 35-year-old woman is found to have a 3.5 cm liver lesion with a central scar on CT scan. She has no symptoms, normal AFP, and normal liver enzymes. What is the appropriate management?**
A. Liver resection
B. Open surgical biopsy
C. Observation and reassurance
D. Arterial embolization

14. **The finding of air in the biliary tract (pneumobilia) in an elderly patient with small bowel obstruction and a history of gallstones is diagnostic of:**
A. Mirizzi's syndrome
B. Bouveret syndrome
C. Gallstone ileus
D. Zollinger-Ellison syndrome

15. **A 25-year-old woman presents with RUQ pain. Ultrasound shows an 8 cm well-circumscribed cyst with a "rosette" appearance (daughter cysts). What is the preferred treatment?**
A. Pericystectomy
B. Percutaneous catheter drainage
C. Metronidazole
D. Albendazole alone

16. **By definition, "cholangitis" is:**
A. The presence of stones in the common bile duct
B. The presence of stones in the gallbladder
C. Inflammation of the gallbladder
D. Infection/inflammation of the common bile duct

17. **Which of the following is the most appropriate initial imaging test for a patient suspected of having obstructive jaundice?**
A. HIDA scan
B. Ultrasound of the abdomen
C. CT scan
D. ERCP

18. **Bouveret syndrome is defined as:**
A. Small bowel obstruction due to a gallstone in the ileum
B. Gastric outlet obstruction due to a large gallstone impacted in the duodenum
C. Compression of the common hepatic duct by a stone in the gallbladder neck

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D. Perforation of the gallbladder into the peritoneum

19. **Mirizzi's syndrome occurs when:**
A. A gallstone perforates into the ileum.
B. A stone in the gallbladder neck or cystic duct causes extrinsic compression of the common hepatic duct.
C. A stone is impacted in the ampulla of Vater.
D. There is congenital cystic dilation of the common bile duct.
20. **What is the recommended screening for cholangiocarcinoma in individuals with cirrhosis?**
A. Ultrasound and Alpha-fetoprotein (AFP)
B. CA 19-9 and Ultrasound
C. ERCP
D. CT scan every 6 months
21. **Which primary liver cancer has the highest incidence in patients with post-hepatitis cirrhosis?**
A. Hepatocellular Carcinoma (HCC)
B. Cholangiocarcinoma
C. Fibrolamellar HCC
D. Hepatoblastoma
22. **What is the criteria for the surgical removal of a liver cell adenoma?**
A. Any adenoma regardless of size
B. Symptomatic lesions or those > 5 cm in diameter
C. Asymptomatic lesions < 3 cm
D. Only if it is associated with acute poisoning
23. **Which of the following is a complication of percutaneous puncture and hypertonic saline injection of a hydatid cyst if there is a communication with the biliary tree?**
A. Spillage and secondary seeding
B. Anaphylactic shock
C. Hemorrhage
D. Sclerosing cholangitis
24. **Which of the following is true regarding the treatment of acute cholecystitis presenting more than 3 days after the onset of symptoms?**
A. Early cholecystectomy should always be performed.
B. Initial conservative management followed by cholecystectomy after 6-8 weeks is often preferred.
C. Emergency cholecystostomy is mandatory.
D. No surgical treatment is ever required.
25. **Treatment of hydatid disease of the liver with mebendazole or albendazole is indicated in which of the following?**
A. Treatment of elderly or frail patients unfit for surgery
B. Treatment of recurrent cases
C. Pre- and postoperative prophylaxis to prevent recurrence
D. All of the above
26. **Periampullary carcinoma can arise from which of the following structures?**
A. Ampulla of Vater
B. Duodenum
C. Lower end of the common bile duct (CBD)
D. All of the above
27. **Liver cirrhosis causes which type of intrahepatic portal hypertension?**
A. Pre-sinusoidal
B. Sinusoidal
C. Post-sinusoidal
D. Extra-hepatic
28. **According to the Milan criteria, a patient with HCC is a candidate for liver transplantation if they have:**
A. A single lesion < 5 cm or up to 3 nodules each < 3 cm, with no extrahepatic spread or vascular invasion.
B. Any number of nodules as long as they are confined to one lobe.
C. A single lesion < 10 cm.
D. Multiple metastases confined to

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one lobe.

29. **What is the most malignant primary liver tumor?**
    A. HCC
    B. Liver metastasis
    C. Cholangiocarcinoma
    D. Hepatocholangiocarcinoma
30. **Operable Klatskin tumors (hilar cholangiocarcinoma) are best treated by:**
    A. Whipple operation
    B. Excision and Roux-en-Y hepaticojejunostomy
    C. Excision and Roux-en-Y choledochojejunostomy
    D. Stenting by ERCP or PTC
31. **Which of the following is used for the follow-up of a patient after successful resection of hepatocellular carcinoma?**
    A. Alpha-fetoprotein (AFP)
    B. Alkaline phosphatase
    C. Carcinoembryonic antigen (CEA)
    D. Ultrasound
32. **A 75-year-old woman with a 7-cm liver hemangioma is asymptomatic. What would be a reasonable indication for surgical intervention?**
    A. Pain, shortness of breath, or early satiety
    B. Spontaneous hemorrhage
    C. High-output cardiac failure
    D. Disseminated intravascular coagulation (DIC)
    E. All of the above
33. **A 50-year-old woman has an 8-cm well-circumscribed liver cyst with a "rosette" appearance on ultrasound. What is the preferred treatment?**
    A. Pericystectomy
    B. Percutaneous catheter drainage
    C. Transperitoneal surgical drainage
    D. Metronidazole therapy
34. **A 63-year-old woman with unresectable cholangiocarcinoma presents with fever, RUQ pain, and jaundice. Ultrasound shows a round hypoechoic liver lesion with mildly dilated intrahepatic ducts. What is the most appropriate management?**
    A. Antibiotics for 14 days
    B. Percutaneous drainage and IV antibiotics
    C. Laparoscopic cholecystectomy
    D. Emergent exploratory laparotomy
35. **A 25-year-old woman on oral contraceptives is found to have a 6-cm hypervascular mass in the right lobe of the liver. What is the appropriate management?**
    A. Discontinuation of oral contraceptives and observation with serial CT
    B. Percutaneous needle biopsy
    C. Hepatic resection
    D. Arterial embolization
36. **Which of the following is true regarding liver anatomy?**
    A. The right and left lobes are divided by the falciform ligament.
    B. The portal triad consists of the hepatic artery, portal vein, and bile duct.
    C. The right lobe contains anterior and posterior segments.
    D. Both B and C are correct.
37. **Which of the following is typically seen on ultrasound imaging of the portal vein?**
    A. Hyperechoic vessel walls
    B. Hepatofugal blood flow
    C. Diastolic reversal of flow
    D. Location between hepatic segments
38. **Regarding the hepatic functional unit, which of the following is true?**
    A. The center of the hepatic lobule is the hepatic venule.
    B. Zone I is the most susceptible to hypoxic injury.
    C. Zone III has the highest oxygen tension.
    D. Bile flows toward the

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centrilobular hepatic venule.

39. **24. Which of the following defines Mirizzi syndrome?**
A. A gallstone impacted in the cystic duct or gallbladder neck compressing the common hepatic duct.
B. Dilatation of the common bile duct due to a stone at the Ampulla of Vater.
C. Infection of the common bile duct causing Charcot's triad.
D. The presence of gas in the biliary tree due to a cholecystoenteric fistula.
40. **A 46-year-old female presents with fever and jaundice five days after a laparoscopic cholecystectomy. Ultrasound shows a CBD diameter of 9 mm. What is the most appropriate management?**
A. IV fluids and antibiotics only
B. Emergent bile duct exploration
C. Emergent endoscopic biliary drainage (ERCP)
D. Percutaneous cholecystostomy
41. **Regarding Klatskin tumors (hilar cholangiocarcinoma), which treatment is correct?**
A. Surgical excision of the common hepatic duct with hepatic resection and hepaticojejunostomy
B. Mid-biliary tree excision with hepaticojejunostomy
C. Whipple operation (pancreaticoduodenectomy)
D. Observation only as they are always inoperable
42. **27. Which of the following is true regarding gallbladder carcinoma?**
A. It is more common in men.
B. It is frequently associated with large gallstones.
C. A "porcelain gallbladder" is a risk factor and should be prophylactically removed.
D. Both B and C are correct.
43. **Which of the following is true regarding the hepatic arterial supply?**
A. Aberrant anatomy is present in less than 5% of patients.
B. The hepatic artery provides 75% of the total blood flow to the liver.
C. A "replaced" right hepatic artery typically arises from the superior mesenteric artery (SMA).
D. The hepatic artery lies dorsal to the portal vein in the hepatoduodenal ligament.
44. **The falciform ligament divides the liver into which surgical sections?**
A. The right lobe and the left lobe
B. The caudate lobe and the quadrate lobe
C. The left medial section and the left lateral section
D. Segment IV and Segment V
45. **Which primary liver cancer is most common in children?**
A. Hepatocellular carcinoma (HCC)
B. Cholangiocarcinoma
C. Hepatoblastoma
D. Fibrolamellar HCC
46. **Which of the following is used for the screening of cholangiocarcinoma in patients with cirrhosis?**
A. Ultrasound
B. Alpha-fetoprotein (AFP)
C. ERCP
D. CA 19-9
47. **A "stellate scar" seen on a triphasic CT scan is pathognomonic for:**
A. Hepatocellular carcinoma
B. Focal nodular hyperplasia
C. Hepatic hemangioma
D. Pyogenic liver abscess
48. **Regarding the hepatic functional unit, which of the following is true?**
A. The center of the hepatic lobule is the portal triad.
B. Blood flows from the hepatic vein to the portal triad.

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C. Zone 3 is the most susceptible to hypoxic injury.
D. Bile flows toward the centrilobular hepatic venule.

49. **What is the most common benign tumor of the liver?**
A. Hemangioma
B. Focal nodular hyperplasia
C. Liver cell adenoma
D. Simple hepatic cyst

50. **Which of the following is the treatment of choice for an amoebic liver abscess?**
A. Surgical drainage
B. Albendazole
C. Metronidazole
D. Formal hepatectomy

51. **In a patient with obstructive jaundice, what is the most appropriate initial imaging test?**
A. HIDA scan
B. Ultrasound of the abdomen
C. CT scan
D. ERCP

52. **Mirizzi syndrome is defined as:**
A. A gallstone impacted in the cystic duct or gallbladder neck compressing the common hepatic duct.
B. Small bowel obstruction due to a gallstone in the ileum.
C. Gastric outlet obstruction due to a gallstone in the duodenum.
D. Inflammation of the common bile duct.

53. **Bouveret syndrome is defined as:**
A. Gallstone ileus in the terminal ileum.
B. Gastric outlet obstruction caused by a large gallstone impacted in the duodenum.
C. Dilatation of the common bile duct due to a stone.
D. Chronic cholecystitis with a porcelain gallbladder.

54. **What is the recommended screening for cholangiocarcinoma in individuals with cirrhosis?**
A. Ultrasound
B. Alpha-fetoprotein (AFP)
C. CA 19-9
D. ERCP

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The Pancreas

1. **A patient who undergoes a total pancreatectomy is expected to develop which of the following complications?**
   A. Diabetes mellitus and steatorrhea
   B. Diabetes mellitus and constipation
   C. Isolated hypoglycemia
   D. Hypoglycemia and steatorrhea
2. **Which of the following is an important prognostic sign in acute pancreatitis according to Ranson's criteria at admission?**
   A. Amylase level
   B. Age
   C. Total bilirubin level
   D. Lipase level
3. **The most common causative factor of chronic pancreatitis is:**
   A. Alcohol consumption
   B. Gallstones in the lower CBD
   C. Viral infection
   D. Autoimmune disease
4. **A 39-year-old male presents with fever and epigastric pain 5 weeks after an episode of acute pancreatitis. CT shows a 6-cm rim-enhancing fluid collection. What is the most appropriate management?**
   A. Antibiotic therapy alone
   B. CT-guided aspiration with repeat imaging
   C. Antibiotics and percutaneous catheter drainage
   D. Surgical internal drainage (cyst-gastrostomy)
5. **A 79-year-old woman has a cystic lesion in the tail of the pancreas with an elevated CEA level in the cyst fluid. What is the best treatment?**
   A. Distal pancreatectomy
   B. Serial CT scans
   C. Percutaneous drainage
   D. ERCP with pancreatic stent placement
6. **Which parameter is NOT part of the BISAP score used to determine mortality in acute pancreatitis?**
   A. Blood Urea Nitrogen (BUN) > 25 mg/dL
   B. Impaired mental status
   C. Pleural effusion
   D. Leukocyte count > 16,000/mm³
7. **A patient with acute pancreatitis is found to have an ill-defined 4x4 cm mass on CT scan two weeks after the initial episode. What is the most appropriate management?**
   A. Urgent exploration and drainage
   B. Percutaneous aspiration
   C. Clinical observation (suspected phlegmon or early pseudocyst)
   D. Distal pancreatectomy
8. **In Ranson's criteria for acute pancreatitis, which of the following is a prognostic sign assessed at the time of admission?**
   A. Serum Calcium
   B. Age
   C. Hematocrit drop
   D. Arterial pO2
9. **A patient presents with fever and epigastric pain 5 weeks after an episode of acute pancreatitis. CT shows a rim-enhancing fluid collection. The most appropriate management is:**
   A. Antibiotics alone
   B. Percutaneous catheter drainage
   C. Immediate surgical resection
   D. Observation with repeat imaging in 6 months

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Appendix and Intestinal Obstruction

1. **A 15-year-old boy has RIF pain and tenderness. At surgery, the appendix is normal, but the terminal ileum is inflamed with fibrinopurulent exudate (suggestive of Crohn's disease). What is the most appropriate next step?**
   A. Close the abdomen after culturing the exudate
   B. Perform a standard appendectomy
   C. Resect the involved terminal ileum
   D. Perform an ileocolic resection
2. **A pathology report after an appendectomy reveals a 1.4 cm carcinoid tumor at the tip of the appendix extending to the mesosalpinx. There is no evidence of nodal or distant metastasis. What is the appropriate management?**
   A. Right hemicolectomy
   B. Right hemicolectomy and chemotherapy
   C. Chemotherapy only
   D. No further treatment
3. **All of the following statements regarding appendectomy are true EXCEPT:**
   A. Acute appendicitis is the most common indication for surgery.
   B. For an appendicular mass or abscess, immediate appendectomy is generally contraindicated.
   C. Chronic appendicitis is a recognized clinical indication for surgery.
   D. Carcinoid tumors confined to the appendix that are larger than 2 cm can be treated by simple appendectomy.
4. **All of the following are types of fistula-in-ano EXCEPT:**
   A. Suprasphincteric
   B. Extrasphincteric
   C. Submucosal
   D. Trans-sphincteric
   E. Intersphincteric
5. **The most common anatomical site for an anal fissure is the:**
   A. Anterior midline
   B. Left lateral position
   C. Right lateral position
   D. Posterior midline
   E. None of the above
6. **With regard to anal fissures, which of the following statements is true?**
   A. It is typically located above the dentate line.
   B. Treatment primarily consists of fissurectomy and lateral external sphincterotomy.
   C. The operation of choice for a midline fissure is simple excision of the fissure.
   D. Lateral partial internal sphincterotomy is the operation of choice for acute fissures.
   E. It is located in the posterior midline in more than 90% of patients.
7. **The most common complication following a hemorrhoidectomy is:**
   A. Urinary retention
   B. Rectal bleeding
   C. Fecal incontinence
   D. Wound infection
8. **A patient with right-sided colon cancer is more likely than a patient with left-sided colon cancer to:**
   A. Have obstructive signs
   B. Show bright red blood in the stool
   C. Present with iron-deficiency anemia

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D. Have chronic constipation
E. Have lower abdominal pain

9. **The most common cause of lower gastrointestinal (GIT) bleeding is:**
   A. Colonic cancer
   B. Diverticulosis
   C. Anal fissure
   D. Amoebiasis infection
   E. Hemorrhoids
10. **A 15-year-old boy has RIF pain and tenderness. At surgery, the appendix is normal, but the terminal ileum is inflamed with fibrinopurulent exudate (suggestive of Crohn's disease). What is the most appropriate next step?**
    A. Close the abdomen after culturing the exudate
    B. Perform a standard appendectomy
    C. Resect the involved terminal ileum
    D. Perform an ileocolic resection
11. **A pathology report after an appendectomy reveals a 1.4 cm carcinoid tumor at the tip of the appendix extending to the mesosalpinx. There is no evidence of nodal or distant metastasis. What is the appropriate management?**
    A. Right hemicolectomy
    B. Right hemicolectomy and chemotherapy
    C. Chemotherapy only
    D. No further treatment
12. **All of the following are indications for an appendectomy EXCEPT:**
    A. Acute appendicitis
    B. Chronic appendicitis
    C. An appendicular mass or abscess (performed 3–6 months after resolution)
    D. A carcinoid tumor confined to the appendix that is larger than 2 cm
13. **Intestinal obstruction is typically NOT caused by which of the following?**
    A. Omentum (trapped in a hernia without bowel)
    B. Richter's hernia
    C. Littre's hernia
    D. All of the above cause obstruction
14. **What is the best treatment for uncomplicated acute appendicitis?**
    A. Urgent appendectomy
    B. Ultrasound-guided aspiration
    C. Ochsner-Sherren regimen
    D. Conservative management with antibiotics only
15. **What is the appropriate treatment for an appendicular abscess?**
    A. If ultrasound aspiration fails, perform open surgery to drain all loculi and leave a drain.
    B. Immediate urgent appendectomy and peritoneal toilet.
    C. Conservative Ochsner-Sherren regimen only, regardless of progress.
    D. Right hemicolectomy.
16. **What is the recommended treatment for an appendicular abscess if ultrasound-guided aspiration fails?**
    A. Conservative management (Ochsner-Sherren regimen)
    B. Immediate laparoscopic appendectomy
    C. Open surgery to drain all loculi and placement of a drain
    D. Right hemicolectomy
17. **What is the most appropriate management for uncomplicated acute appendicitis?**
    A. Urgent appendectomy
    B. Ochsner-Sherren regimen
    C. Ultrasound-guided aspiration
    D. Peritoneal toilet via laparotomy
18. **A hernia containing the appendix is known as:**
    A. Richter hernia
    B. Littre's hernia

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C. Amyand's hernia
D. Spigelian hernia

19. **A "strangulated obstruction" is defined as an obstruction in which:**
A. The lumen is blocked but the blood supply is intact.
B. The vascular supply to a segment of the intestine is compromised.
C. Only a portion of the bowel wall is trapped (Richter's hernia).
D. There is a functional failure of peristalsis (paralytic ileus).
20. **What is the most appropriate management for a confirmed appendicular abscess if ultrasound-guided aspiration fails?**
A. Urgent appendectomy and peritoneal toilet
B. Right hemicolectomy
C. Open surgical drainage and placement of a drain
D. Conservative treatment with the Ochsner-Sherren regimen
21. **Which of the following is NOT an indication for an appendicectomy?**
A. Acute appendicitis
B. Chronic appendicitis
C. Appendicular mass (immediate operation)
D. Carcinoid tumor of the appendix > 2 cm
22. **What is the best management for uncomplicated acute appendicitis?**
A. Urgent appendectomy
B. Ochsner-Sherren regimen
C. Ultrasound-guided aspiration
D. Conservative management with antibiotics only
23. **"Strangulated obstruction" of the intestine is defined as:**
A. Mechanical blockage without compromised viability.
B. Obstruction in which the vascular supply to a segment of intestine is compromised.
C. A functional failure of peristalsis.
D. Obstruction involving only the anti-mesenteric wall of the bowel.
24. **The Ochsner-Sherren regimen is indicated for the management of:**
A. Acute perforated appendicitis
B. Appendicular mass
C. Carcinoid tumor of the appendix
D. Recurrent appendicitis

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Peritoneum, Omentum, and Mesentery

1. **What is the most common cause of spontaneous bacterial peritonitis (primary peritonitis)?**
   A. Klebsiella
   B. Streptococcus pneumoniae
   C. Escherichia coli
   D. Haemophilus influenzae
   E. Anaerobic microorganisms
2. **What is the most common clinical type of tuberculous peritonitis?**
   A. Acute miliary type
   B. Caseous type (purulent form)
   C. Ascitic type
   D. Encysted type
   E. Adhesive type (fibrous or plastic form)
3. **Which of the following is FALSE regarding the clinical manifestations of acute mesenteric lymphadenitis?**
   A. It primarily affects children.
   B. Abdominal pain occurs with periods of complete freedom from pain (intermittent pain).
   C. There is a positive Rovsing's sign.
   D. The point of maximum tenderness occurs above and medial to McBurney's point.
   E. Shifting tenderness is present.
4. **All of the following are retroperitoneal organs EXCEPT:**
   A. Kidneys
   B. Pancreas
   C. Ureters
   D. First part of the duodenum
   E. Second part of the duodenum
5. **Which of the following structures is contained within the peritoneal cavity?**
   A. Pancreas
   B. Transverse colon
   C. Kidneys
   D. Ureter
   E. Ascending colon
6. **All of the following are typical characteristics of the visceral peritoneal layer EXCEPT:**
   A. Underlying autonomic nervous control
   B. Well-localized pain
   C. Sensitivity to stretching, distention, or ischemia
   D. Lines the outer surface of organs
   E. Firmly adheres to the organ and cannot be stripped
7. **All of the following are true regarding the physiology of peritoneal fluid EXCEPT:**
   A. Normally, the peritoneal cavity contains about 100 ml of clear fluid.
   B. The peritoneal fluid is pale yellow and contains lymphocytes and other leukocytes.
   C. Peritoneal fluid is secreted by mesothelial cells.
   D. Peritoneal fluid allows easy movement and peristalsis of the viscera.
   E. Normally, peritoneal fluid moves downward to the pelvic cavity by gravity.
8. **Which of the following statements is true regarding the peritoneal compartments?**
   A. The liver divides the suprahepatic space into right and left spaces.
   B. The right subhepatic space is also known as the hepatorenal pouch (Morison's pouch).
   C. The left subhepatic space is the most common site for a subphrenic abscess.
   D. The right paracolic gutter is located medial to the ascending colon.

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9. **All of the following statements regarding the physiology of peritoneal fluid are true EXCEPT:**
   A. The peritoneal cavity normally contains about 100 ml of clear fluid.
   B. The fluid is normally pale yellow and contains lymphocytes and other leukocytes.
   C. It acts as a lubricant to facilitate the movement of viscera and peristalsis.
   D. Under normal conditions, the fluid moves upward toward the subdiaphragmatic spaces.
10. **All of the following are characteristic of the visceral peritoneal layer EXCEPT:**
    A. It lines the outer surface of the abdominal organs.
    B. It is firmly adherent to the organs and cannot be easily stripped.
    C. It is under the control of the autonomic nervous system.
    D. It is sensitive to well-localized sharp pain.
11. **Which of the following is NOT a branch of the superior mesenteric artery (SMA)?**
    A. Superior pancreaticoduodenal artery
    B. Middle colic artery
    C. Right colic artery
    D. Jejunal and ileal arteries
    E. Ileocolic artery
12. **Which of the following statements regarding primary peritonitis is FALSE?**
    A. It is common in young girls between 3–9 years of age.
    B. It is common in boys between 3–9 years of age.
    C. It frequently occurs in children with nephrotic syndrome.
    D. In females, it is often caused by pneumococci or streptococci traveling via the fallopian tubes.
    D. Right paracolic gutter
13. **Which of the following is FALSE regarding the clinical manifestations of acute mesenteric lymphadenitis?**
    A. It primarily affects children.
    B. There is a positive Rovsing's sign.
    C. Abdominal pain is often intermittent with periods of complete freedom from pain.
    D. Tenderness is always localized exactly at McBurney's point.
    E. Shifting tenderness may be present.
14. **All of the following are true about the physiology of peritoneal fluid EXCEPT:**
    A. The peritoneal cavity normally contains 100 ml of clear fluid.
    B. The fluid is normally pale yellow and contains lymphocytes and leukocytes.
    C. It facilitates the movement of viscera and peristalsis.
    D. Peritoneal fluid normally moves downward toward the pelvis due to gravity.
15. **Which structure is often referred to as the "abdominal policeman"?**
    A. Greater omentum
    B. Falciform ligament
    C. Hepatoduodenal ligament
    D. Lesser omentum
16. **Where is the most common site for an intra-abdominal abscess collection?**
    A. Morrison's pouch (Hepatorenal space)
    B. Pelvic cavity
    C. Left paracolic gutter
    D. Subphrenic space
17. **Where is the most common site for an intraabdominal abscess to collect?**
    A. Pelvic cavity
    B. Subphrenic space
    C. Morison's pouch
    D. None of above

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Abdominal Wall and Hernia

1. **A 58-year-old man has a reducible right groin hernia. Which of the following clinical changes is most suggestive of strangulation requiring emergent repair?**
   A. Increase in the size of the hernia
   B. Descent of the hernia into the scrotum
   C. Development of a second hernia on the contralateral side
   D. Inability to reduce the hernia (incarceration) with associated pain
2. **A 58-year-old man has a reducible right groin hernia. Which of the following clinical changes is most suggestive of strangulation requiring emergent repair?**
   A. Increase in the size of the hernia
   B. Descent of the hernia into the scrotum
   C. Development of a second hernia on the contralateral side
   D. Inability to reduce the hernia (incarceration) with associated pain
3. **In inguinal hernias in infants and children, which of the following is NOT true?**
   A. They are almost always of the direct type.
   B. Surgical repair should be performed soon after diagnosis.
   C. Herniotomy alone is the standard procedure.
   D. They are usually of the indirect type due to a patent processus vaginalis.
4. **Which of the following describes a "divarication of the recti"?**
   A. A true incisional hernia through the linea alba
   B. Separation of the rectus abdominis muscles due to stretching of the linea alba
   C. A hernia occurring at the lateral border of the rectus sheath
   D. A type of paraumbilical hernia
5. **A hernia that develops at the site of a previous abdominal surgical scar is called:**
   A. Incisional hernia
   B. Femoral hernia
   C. Inguinal hernia
   D. Epigastric hernia
6. **A hernia that lies below the inguinal ligament and lateral to the pubic tubercle is a:**
   A. Direct inguinal hernia
   B. Femoral hernia
   C. Obturator hernia
   D. Spigelian hernia
7. **Regarding femoral hernia, all of the following are true EXCEPT:**
   A. Cooper’s ligament forms the posterior border of the femoral canal.
   B. The hernia sac is medial to the femoral vein.
   C. Repair involves approximating the iliopubic tract or inguinal ligament to Cooper’s ligament.
   D. The Bassini repair is the most appropriate surgical technique for this hernia.
8. **Which hernia contains a Meckel's diverticulum?**
   A. Richter hernia
   B. Littre's hernia
   C. Amyand's hernia
   D. Lumbar hernia
9. **A hernia containing only a portion of the anti-mesenteric wall of the intestine is called:**
   A. Richter hernia
   B. Littre's hernia
   C. Spigelian hernia
   D. Incarcerated hernia
10. **A hernia occurring between the semilunar line and the lateral**

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border of the rectus muscle is a:
A. Lumbar hernia
B. Spigelian hernia
C. Femoral hernia
D. Direct inguinal hernia

11. **In which type of strangulated hernia is intestinal obstruction most likely to be absent?**
A. Richter hernia
B. Littre's hernia
C. Strangulated omentocele
D. All of the above
12. **Which groin hernia follows the path of the spermatic cord within the cremaster muscle?**
A. Direct inguinal hernia
B. Indirect inguinal hernia
C. Femoral hernia
D. Spigelian hernia
13. **A 22-year-old woman has a reducible bulge below the inguinal ligament. What is the most appropriate management?**
A. Observation and follow-up in 6 months
B. Observation until symptoms worsen
C. Elective surgical repair
D. Emergent surgical repair
14. **Regarding femoral hernias, which statement is FALSE?**
A. Cooper's ligament forms the posterior border of the femoral canal.
B. The hernia sac is medial to the femoral vein.
C. A Bassini repair is the most appropriate surgical technique for this hernia.
D. Repair involves approximating the iliopubic tract or inguinal ligament to Cooper's ligament.
15. **A hernia containing the appendix is known as:**
A. Richter hernia
B. Littre's hernia
C. Amyand's hernia
D. Spigelian hernia
16. **A hernia containing a Meckel's diverticulum is known as:**
A. Richter hernia
B. Littre's hernia
C. Amyand's hernia
D. Lumbar hernia
17. **A hernia that involves only the anti-mesenteric wall of the intestine is called:**
A. Richter hernia
B. Littre's hernia
C. Spigelian hernia
D. Obturator hernia
18. **A hernia containing the appendix is known as:**
A. Richter hernia
B. Littre's hernia
C. Amyand's hernia
D. Spigelian hernia
19. **A hernia containing a Meckel's diverticulum is known as:**
A. Richter hernia
B. Littre's hernia
C. Amyand's hernia
D. Lumbar hernia
20. **A hernia that involves only a portion of the anti-mesenteric wall of the intestine is a:**
A. Richter hernia
B. Littre's hernia
C. Spigelian hernia
D. Obturator hernia
21. **A hernia occurring between the semilunar line and the lateral border of the rectus muscle is a:**
A. Femoral hernia
B. Spigelian hernia
C. Lumbar hernia
D. Epigastric hernia
22. **Regarding femoral hernias, all of the following are true EXCEPT:**
A. The hernia sac is medial to the femoral vein.
B. They have a high risk of strangulation.
C. The Bassini repair is the operation of choice.
D. Cooper's ligament forms the posterior border of the femoral canal.

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Urology and Urinary Tract Diseases

1. **Surgical management of renal tuberculosis (TB) may include:**
   A. Nephrectomy
   B. Ureterocalycostomy
   C. Pyeloplasty
   D. All of the above
2. **Regarding urinary calculi (stones), which of the following is true?**
   A. Females are more commonly affected than males.
   B. The most common type of stone is composed of uric acid.
   C. Ureteric and vesicoureteric junction obstruction are common causes of hydronephrosis.
   D. Extracorporeal Shock Wave Lithotripsy (ESWL) is the treatment of choice for all radiolucent stones.
3. **Which of the following statements is true regarding urinary tract obstruction?**
   A. Supravesical causes (e.g., bilateral ureteric stones) result in bilateral hydronephrosis.
   B. Urinary infection is an uncommon complication of obstruction.
   C. Parenchymal changes are secondary to morphological changes in the collecting system.
   D. Nephrolithiasis is rarely a complication of chronic stasis.
4. **Which of the following statements about Urinary Tract Infections (UTIs) is FALSE?**
   A. E. coli is the most common causative agent.
   B. UTIs are more common in females than in males.
   C. Septicemia and septic shock are potential life-threatening complications.
   D. The hematogenous route is the most common pathway for infection to reach the bladder.
5. **All of the following are symptoms of bladder irritation EXCEPT:**
   A. Terminal dripping
   B. Increased frequency
   C. Urgency
   D. Strangury
6. **All of the following are recognized causes of hematuria EXCEPT:**
   A. Urinary calculi
   B. Benign Prostatic Hyperplasia (BPH)
   C. Urinary Tract Infection (UTI)
   D. Transitional Cell Carcinoma (TCC)
   E. Renal simple cyst
7. **A renal mass may be differentiated from all of the following EXCEPT:**
   A. Pyonephrosis
   B. Ovarian tumor
   C. Hydronephrosis
   D. Polycystic kidney
   E. Splenomegaly
8. **Pain is a characteristic feature of which of the following scrotal conditions?**
   A. Varicocele
   B. Trauma
   C. Testicular torsion
   D. Both B and C
9. **Which of the following statements regarding Schistosomiasis (Bilharzia) of the urinary tract is FALSE?**
   A. The urinary bladder is the most common site for infection.
   B. "Sandy patches" on cystoscopy are due to aggregations of calcified eggs in the submucosa.
   C. It primarily affects the elderly population.
   D. The initial clinical manifestation may be "swimmers' itch."
10. **Which of the following is NOT true regarding a simple renal**

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cyst?
A. It is typically filled with clear fluid.
B. It may be unilateral or bilateral.
C. It usually communicates with the nephron or renal pelvis.
D. It appears as an avascular mass with a smooth wall on imaging.

11. **Which of the following is FALSE regarding the treatment of acute urinary retention?**
A. Conservative treatment is always attempted first.
B. If conservative measures fail, urethral catheterization is indicated.
C. If the obstruction is organic, parasympathomimetic drugs are the first-line treatment.
D. Suprapubic cystostomy may be required if a catheter cannot be passed.
12. **Which of the following statements regarding polycystic kidney disease is FALSE?**
A. The adult form is typically inherited in an autosomal recessive pattern.
B. It is a common cause of progressive renal failure.
C. Impairment of renal function with elevation of urea and creatinine typically begins between ages 40 and 50.
D. It is usually a bilateral condition.
13. **Regarding urinary stones, which of the following is true?**
A. Females are more commonly affected than males.
B. The most common type of stone is uric acid.
C. Ureteric obstruction is a common cause of hydronephrosis.
D. ESWL is used for all radiolucent stones larger than 2 cm.
14. **Which of the following statements about Urinary Tract Infections (UTIs) is FALSE?**
A. E. coli is the most common causative agent.
B. UTIs are more common in females than males.
C. Septicemia and septic shock are potential complications.
D. The most common route of infection is hematogenous spread.
15. **Symptoms of bladder irritation include all of the following EXCEPT:**
A. Terminal dripping
B. Frequency
C. Urgency
D. Strangury
16. **All of the following are causes of hematuria EXCEPT:**
A. Urinary stones
B. Benign Prostatic Hyperplasia (BPH)
C. Simple renal cyst
D. Transitional Cell Carcinoma (TCC)
17. **The differential diagnosis of a renal mass includes all of the following EXCEPT:**
A. Pyonephrosis
B. Ovarian tumor
C. Hydronephrosis
D. Polycystic kidney
18. **Scrotal examination reveals pain in all of the following conditions EXCEPT:**
A. Varicocele
B. Scrotal trauma
C. Testicular torsion
D. Epididymo-orchitis
19. **Regarding bilharzial (Schistosomiasis) infection, which statement is FALSE?**
A. The urinary bladder is a common site for infection.
B. Sandy patches are due to the aggregation of calcified eggs in the submucosa.
C. It primarily affects only the elderly.
D. The clinical picture may include "swimmer's itch."
20. **Which of the following is NOT true regarding a simple renal cyst?**

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A. It is typically filled with clear fluid.
B. It may be unilateral or bilateral.
C. It communicates directly with the renal pelvis.
D. It has an avascular, smooth wall on imaging.

21. **Polycystic kidney disease is characterized by all of the following EXCEPT:**
A. It is typically an autosomal recessive condition in adults.
B. It is a common cause of renal failure.
C. Renal impairment usually begins between the ages of 40 and 50.
D. It is usually bilateral.

22. **Which of the following is FALSE regarding the treatment of acute urinary retention?**
A. Conservative treatment (e.g., warm baths) is attempted first.
B. If conservative treatment fails, catheterization is performed.
C. If the obstruction is organic, parasympathomimetic drugs are the treatment of choice.
D. Suprapubic cystostomy is indicated if urethral catheterization fails.

23. **Regarding urinary stones, which statement is true?**
A. Most common calculi are made of uric acid.
B. Females are affected more than males.
C. Ureteral obstruction is a common cause of hydronephrosis.
D. ESWL is used for all stones regardless of size or composition.

24. **All of the following are symptoms of bladder irritation EXCEPT:**
A. Terminal dripping
B. Frequency
C. Urgency
D. Strangury

25. **Which of the following is NOT a common cause of hematuria?**
A. Urinary stones
B. Benign Prostatic Hyperplasia (BPH)
C. Simple renal cyst
D. Transitional Cell Carcinoma (TCC)

26. **Regarding adult polycystic kidney disease, which statement is FALSE?**
A. It is an autosomal recessive condition.
B. It is a common cause of renal failure.
C. Renal impairment usually begins between age 40 and 50.
D. It is typically a bilateral condition.

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Orthopedics and Fractures

1. **A young man is placed in a cast for a supracondylar humerus fracture. Hours later, he develops intense pain and weakness in the hand, though pulses remain normal. What is the most appropriate initial management?**
   A. Observation
   B. Repeat imaging
   C. Elevation of the extremity
   D. Immediate removal of the cast
   E. Immediate fasciotomy
2. **A patient presents to the ER with a degloving injury of the lower extremity associated with an open fracture. What is the appropriate initial orthopedic management?**
   A. External fixation
   B. Internal fixation
   C. Splinting only
   D. Primary skin closure
3. **A young man is placed in a cast for a supracondylar humerus fracture. Hours later, he develops intense pain and weakness in the hand, though pulses remain normal. What is the most appropriate initial management?**
   A. Observation
   B. Repeat imaging
   C. Elevation of the extremity
   D. Immediate removal of the cast
   E. Immediate fasciotomy
4. **A patient presents to the ER with a degloving injury of the lower extremity associated with an open fracture. What is the appropriate initial orthopedic management?**
   A. External fixation
   B. Internal fixation
   C. Splinting only
   D. Primary skin closure
5. **A 55-year-old man with atrial fibrillation presents with a cold, numb, and pulseless left lower extremity. He undergoes an emergency popliteal embolectomy. Which additional procedure is often required to prevent further tissue damage?**
   A. Electromyography (EMG) of the leg
   B. Measurement of anterior compartment pressure
   C. Fasciotomy of the anterior compartment only
   D. Fasciotomy of all four compartments of the leg
   E. Application of a posterior splint
6. **Which of the following is NOT true regarding compartment syndrome?**
   A. It can result from a supracondylar fracture of the humerus.
   B. Pallor and hypoesthesia are alarming clinical signs.
   C. Increased pressure in the limb compartments jeopardizes the blood supply to muscles while nerves are always spared.
   D. Fasciotomy is the definitive treatment.
   E. It can occur due to massive bleeding within the lower limb.

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Pediatric Surgery

1. **A newborn full-term baby boy diagnosed with an imperforate anus is also at high risk for having:**
   A. Dextrocardia
   B. Rib cage anomaly
   C. Tracheoesophageal fistula
   D. Ulnar skeletal deformity
   E. Proximal limb malformation
2. **The most common cause of intestinal obstruction in neonates is:**
   A. Meconium ileus
   B. Intestinal atresia
   C. Hirschsprung's disease
   D. Volvulus
3. **Which of the following is considered the most common type of intestinal malrotation?**
   A. Incomplete rotation
   B. Non-rotation
   C. Reverse rotation
   D. Hyper-rotation
4. **Which of the following operations is used to treat duodenal atresia?**
   A. Duodenoduodenostomy
   B. Duodenojejunostomy
   C. Gastrostomy
   D. Ileostomy
5. **The Ladd's procedure for correcting malrotation includes all of the following key elements EXCEPT:**
   A. Division of Ladd's cecal bands
   B. Broadening of the small intestine mesentery
   C. Incidental appendectomy
   D. Clockwise detorsion of the bowel
   E. Entry into the abdominal cavity and evisceration
6. **Which anomaly is frequently associated with cystic fibrosis?**
   A. Duodenal atresia
   B. Meconium ileus
   C. Hirschsprung's disease
   D. Intestinal rotation
7. **In infants and children, inguinal hernias are typically repaired by:**
   A. Herniotomy alone
   B. Bassini repair
   C. Lichtenstein tension-free repair
   D. Laparoscopic mesh repair

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Perioperative Management and Professionalism

1. **All of the following are advantages of Video-Assisted Thoracic Surgery (VATS) EXCEPT:**
   A. Less postoperative pain and morbidity
   B. Fewer complications
   C. Reduced length of hospital stay
   D. Conversion to open surgery in the presence of dense adhesions
2. **All of the following are general risk factors for postoperative complications EXCEPT:**
   A. Age extremes (very young and very old)
   B. Obesity
   C. Elective surgery
   D. Co-morbid conditions
   E. Drug therapy (e.g., steroids, immunosuppressants)
3. **All of the following are immediate postoperative complications EXCEPT:**
   A. Basal atelectasis
   B. Acute myocardial infarction
   C. Pulmonary embolism
   D. Wound dehiscence
   E. Shock
4. **The most common cause of complications following a pulmonary operation is:**
   A. Atelectasis
   B. Lung abscess
   C. Pneumonia
   D. Wound infection
   E. Pulmonary edema
5. **All of the following are late postoperative complications EXCEPT:**
   A. Intestinal obstruction
   B. Incisional hernia
   C. Wound dehiscence
   D. Recurrence of the reason for surgery (e.g., malignancy)
   E. Keloid or hypertrophic scar formation
6. **All of the following are absolute contraindications for a laparoscopic procedure EXCEPT:**
   A. Patient unfit for general anesthesia
   B. Hemodynamically unstable patient
   C. Patient with a known malignancy
   D. Bleeding diathesis
   E. "Frozen" abdomen (extensive dense adhesions)
7. **The best gas for creating pneumoperitoneum in laparoscopic operations is:**
   A. Oxygen (O2)
   B. Carbon dioxide (CO2)
   C. Nitrous oxide (NO)
   D. Methane
   E. Room air/atmosphere
8. **All of the following are relative contraindications to laparoscopic surgery EXCEPT:**
   A. Severe cardiopulmonary disorders
   B. Pregnancy
   C. Known intra-abdominal malignancy
   D. History of multiple previous abdominal surgeries
9. **All of the following are recognized indications for laparoscopic surgery EXCEPT:**
   A. Appendectomy
   B. Cholecystectomy
   C. Hernia repair
   D. Splenectomy
   E. Frozen abdomen (extensive dense adhesions)
10. **Advantages of laparoscopic procedures compared with open operations include all of the following EXCEPT:**

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A. Decreased incidence of wound infection
B. Decreased length of hospital stay
C. Decreased operative time
D. Decreased requirement for narcotic analgesics
E. Decreased psychological trauma

11. **Acute complications associated with central venous access include all of the following EXCEPT:**
A. Bleeding/Hematoma
B. Hemothorax
C. Pneumothorax
D. Air embolism
E. Catheter migration
12. **Which gas is most commonly used to create pneumoperitoneum in laparoscopy?**
A. Carbon dioxide (CO2)
B. Nitrous oxide (N2O)
C. Oxygen (O2)
D. Nitrogen (N2)
13. **Regarding preoperative antibiotic prophylaxis, which of the following is true?**
A. A single dose should be given 24 hours before surgery.
B. A dose should be given one hour before the skin incision, with a booster if the procedure is lengthy.
C. Antibiotics should only be given postoperatively.
D. Antibiotics are only required for clean wounds.

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ANSWER

Wound Healing and Management

1. C	3. D	5. C	7. C
2. A	4. B	6. B	

Shock and Fluid Resuscitation

1. C	4. C	7. D	10. C
2. A	5. B	8. C	11. A
3. A	6. C	9. C	

Major Trauma and Primary Survey

1. B	11. D	21. D	31. A	41. A
2. D	12. C	22. C	32. C	42. A
3. D	13. D	23. C	33. C	43. C
4. D	14. C	24. B	34. B	44. C
5. C	15. C	25. A	35. C	45. B
6. D	16. E	26. A	36. C	46. A
7. C	17. D	27. C	37. C	47. C
8. B	18. B	28. D	38. B	
9. B	19. E	29. D	39. A	
10. E	20. C	30. D	40. A	

Surgical Infections and Antibiotics

1. A	4. E	7. C	10. D	13. B
2. E	5. A	8. C	11. E	
3. E	6. A	9. A	12. B	

Burns and Principles of Plastic Surgery

1. C	4. C	7. B	10. C	13. D
2. C	5. C	8. D	11. C	
3. D	6. C	9. C	12. D	

Skin, Subcutaneous Tissues, and Reconstructive Surgery

1. A	3. C	5. A
2. C	4. C	6. A

Vascular Surgery and Lymphatic Disorders

1. C	9. C	17. C	25. C	33. B
2. D	10. B	18. A	26. A	34. C
3. D	11. C	19. C	27. E	35. A
4. D	12. E	20. D	28. A	36. A
5. B	13. D	21. E	29. C	37. D
6. A	14. A	22. C	30. A	38. C
7. A	15. B	23. C	31. C	
8. E	16. D	24. B	32. A	

The Breast

1. A	6. A	11. A	16. D	21. C
2. A	7. D	12. C	17. B	22. B
3. B	8. C	13. B	18. A	23. B
4. B	9. A	14. B	19. A	24. C
5. B	10. C	15. B	20. A	

Thyroid Gland and Endocrine Surgery

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1. D	12. D	23. D	34. B	45. A
2. D	13. A	24. D	35. C	46. B
3. D	14. C	25. B	36. B	47. C
4. E	15. D	26. B	37. C	48. B
5. D	16. A	27. A	38. C	49. B
6. C	17. D	28. E	39. C	50. A
7. C	18. C	29. D	40. B	51. C
8. A	19. A	30. D	41. D	52. B
9. C	20. C	31. A	42. B	53. D
10. A	21. D	32. C	43. A	54. C
11. D	22. D	33. B	44. A	55. A

Esophagus and Portal Hypertension

1. B	4. A	7. C	10. A	13. D
2. E	5. B	8. A	11. D	
3. B	6. D	9. C	12. C	

Stomach and Duodenum

1. C	7. A	13. D	19. E	25. C
2. C	8. A	14. D	20. C	26. B
3. A	9. C	15. D	21. B	27. B
4. D	10. C	16. B	22. B	28. B
5. A	11. A	17. B	23. C	
6. E	12. C	18. B	24. B	

The Liver and Biliary System

1. C	12. A	23. D	34. B	45. C
2. A	13. C	24. B	35. C	46. D
3. D	14. C	25. D	36. D	47. B
4. A	15. A	26. D	37. A	48. C
5. D	16. D	27. B	38. A	49. A
6. E	17. B	28. A	39. A	50. C
7. E	18. B	29. C	40. C	51. B
8. D	19. B	30. B	41. A	52. A
9. E	20. B	31. A	42. D	53. B
10. D	21. A	32. E	43. C	54. C
11. D	22. B	33. A	44. A	

The Pancreas

1. A	3. A	5. A	7. C	9. B
2. B	4. C	6. D	8. B	

Appendix and Intestinal Obstruction

1. A	6. E	11. A	16. C	21. C
2. A	7. A	12. C	17. A	22. A
3. D	8. C	13. A	18. C	23. B
4. C	9. B	14. A	19. B	24. B
5. D	10. A	15. A	20. C	

Peritoneum, Omentum, and Mesentery

1. C	5. B	9. D	13. D	17. A
2. C	6. B	10. D	14. D	
3. E	7. E	11. A	15. A	
4. D	8. B	12. B	16. B	

Abdominal Wall and Hernia

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1. D	6. B	11. A	16. B	21. B
2. D	7. D	12. B	17. A	22. C
3. A	8. B	13. C	18. C	
4. B	9. A	14. C	19. B	
5. A	10. B	15. C	20. A	
23.				

Urology and Urinary Tract Diseases

1. A	7. E	13. C	19. C	25. C
2. C	8. D	14. D	20. C	26. A
3. A	9. C	15. A	21. A	
4. D	10. C	16. C	22. C	
5. A	11. C	17. B	23. C	
6. E	12. A	18. A	24. A	

Orthopedics and Fractures

1. D	3. D	5. D	
2. A	4. A	6. C	

Pediatric Surgery

1. C	3. A	5. D	7. A	
2. B	4. A	6. B		

Perioperative Management and Professionalism

1. D	4. A	7. B	10. C	13. B
2. C	5. C	8. C	11. E	
3. D	6. C	9. E	12. A	

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